

HOW ANNOYING IS IT?
DEFINING PARENTAL TOLERANCE FOR CHILDHOOD MISBEHAVIOR

BY

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HOW ANNOYING IS IT?
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Tolerance can be defined as a measurable dimension of child rearing that includes a parent's definition of undesirable behavior. The present study attempted to define parental tolerance for misbehavior and provide reliability and validity data for two newly developed parent report measures of tolerance, the Child Rearing Inventory and the Annoying Behavior Inventory.

Data were collected for 262 participants who were recruited from pediatricians' offices. This sample was 63% Caucasian and included women with children between 3 to 10 years of age.

Examination of the internal consistency and test-retest data for the Child Rearing Inventory and the Annoying Behavior Inventory provided evidence of adequate reliability.

Examination of the relation between the Child Rearing Inventory and the Annoying Behavior Inventory and other parenting and demographic measures provided evidence for concurrent validity. Specifically, maternal tolerance for their child's misbehavior was significantly predicted by the child's age, maternal age, and greater parental annoyance with child misbehavior in general.

Contrary to expectations, race did not predict scores on the Child Rearing Inventory or the Annoying Behavior Inventory. Additionally, no relation was found between socioeconomic status and parental tolerance for misbehavior.

Results suggest that the Child Rearing Inventory and the Annoying Behavior Inventory are clinically valid and reliable measures that can be used to briefly assess parental tolerance for child misbehavior. Social desirability had little effect on the scores for these measures and both measures can be used with a wide range of child ages. Future validation of these measures for use with clinic-referred mothers is warranted.

INTRODUCTION AND REVIEW OF THE LITERATURE

Child behavior is multiply determined by a wide variety of external variables and internal psychological processes. Among these factors which have been shown to influence a child's behavior are the nature and timing of rewards and punishments, the frequency and intensity of such consequences, and the role of the parental authority figure in the child's life (Wahler, 1980; Patterson, 1982; Gelfand & Teti, 1990; Kendziora & O'Leary, 1993; Baumrind, 1996a; Baumrind, 1996b). Regarding this latter point, it has been suggested that parental tolerance for child behavior, and misbehavior in particular, may also play an important role in the development and maintenance of disruptive problems (O'Leary, 1995). As such, parental tolerance occupies an important place in the assessment, treatment, and prevention of childhood disruptive behavior disorders.

In the area of assessment, tolerance can influence a parent's report of their child's behavior. For example, what may appear to be unacceptable behavior to one parent, could be considered unimportant or acceptable to another parent. Tolerance can also differ between two parents so that the same child will be seen by one parent as having severe behavior problems, while the other parent may see the child as having normal behavior. Given the potential for such discrepant reports to exist, an objective index of tolerance would be useful for clinicians in order to provide a means for addressing one aspect of parenting that could significantly influence the quality of family life within the household. Such a measure would not only mark progress within the course of therapy,

but could also help in the identification of parents who are at risk for raising children with disruptive behavior problems due to parents' lenient or intolerant attitudes. The concept, popularly known as "dysfunctional parenting," suggests the critical role that poor parenting practices play in the etiology and maintenance of child behavior problems (Kendziora & O'Leary, 1993). In fact, Kendziora and O'Leary argue that "dysfunctional parenting" should be a diagnosis in its own right as parents are commonly an important part in the development and maintenance of child behavior problems.

For the purpose of this study, tolerance was defined as a measurable dimension of child rearing that reflects a parent's classification of child behavior as undesirable. Information was collected regarding the construct of tolerance, maternal self report for their tolerance of child misbehavior, the behaviors for which they have the least tolerance, the behaviors for which they are likely to punish, and their perception of the amount of problem behavior their children display. The relation between maternal variables including socioeconomic status (SES), race, age, social desirability, negative life events, perceived child behavior problems, and tolerance were evaluated.

The remainder of the chapter provides a critical review of contemporary literature on parenting. Because the focus of this study is the process by which parents define disruptive behavior as undesirable and reprimand their child for this behavior, variables that appear to affect this aspect of parenting, including maternal depression, maternal stress, culture and ethnicity, and SES, are discussed. The review concludes with a summary of existing parenting literature and its relation to the definition of tolerance, followed by a discussion of the specific research question and hypotheses suggested by the review.

Parenting

Parenting is a complex and difficult task regardless of the parent's resources (Abidin, 1990). Indeed, a recent sample of well educated, middle class, Caucasian parents reported that parenting their healthy and developmentally normal infants and toddlers was a stressful job with significant daily hassles (O'Brien, 1996). The parenting practices of mothers with normal, healthy children are the focus of this section.

Parenting has been defined as "anything the parent does, or fails to do, that may affect the child." This includes activities such as playing with the child, disciplining the child, teaching the child, and providing for the child's physical and emotional needs (Kendziora & O'Leary, 1993).

Parents teach their children what behavior is appropriate through discipline and the enforcement of rules (O'Leary, 1995). Discipline and parental authority can be seen as socialization strategies that are intended to control the child's short term behavior, maintain order in the family, and promote the child's development into a socially responsible adult (Baumrind, 1996a; Baumrind, 1996b). Although discipline is an important part of socialization, it is only one of the many socialization strategies that parents use in the child rearing process (Baumrind, 1996b).

There is a wide range of rules for appropriate behavior that parents enforce with their children. Even if a group of parents use the same rules, they are likely to believe that different behaviors are more or less important for their children to learn. Parental rules can be influenced by the child's age and gender, family history, and cultural variables. For example, Caucasian parents in America often enforce rules such as Don't hurt other people; Do what your parents tell you to do; Don't lie; and Don't tease other

children (O'Leary, 1995). When a child breaks one of these "rules," many, but not all, parents will use some means of punishment or reprimand to bring the child's behavior within the boundaries of appropriate behavior.

This process whereby parents define their child's behavior as desirable or undesirable is important to the present study of tolerance. Parents' tolerance for child behavior can be seen as one of the first steps in a discipline situation. What the parents do in response to the behavior they have defined as undesirable falls under the rubric of discipline. There is evidence that some mothers become more upset relative to other mothers in response to child misbehavior or to child negative affect such as whining and crying (O'Leary, 1995). This intolerance for negative behavior and the resultant discipline is important to the focus of this study as well. O'Leary (1995) suggests that some mothers may tend to make more discipline mistakes because they "tolerate or define child misbehaviors differently than effective mothers do."

Throughout each day, parents desire to maintain an acceptable level of child behavioral compliance. To accomplish this, parents must actively monitor their child's behavior, provide contingent reinforcement for the positive behavior that they would like to maintain in their children, ignore behavior that is undesirable but can be categorized as slightly annoying or violating a minor rule for behavior, and punish negative behavior that violates a major rule for behavior (Baumrind, 1996b). Tolerance for child misbehavior is involved in this process because the parent uses some personal standard for distinguishing between negative behavior that can be ignored versus negative behavior that they will promptly discipline. This tolerance is a subjective construct in

that one parent may classify a behavior as acceptable while another parent may classify the same behavior as unacceptable.

Different styles of parenting and specific discipline techniques associated with each parenting style have been studied extensively from the perspective of Caucasian parents. The majority of studies about parenting have been correlational in nature and based on self-report data. However, some research has included experimental manipulations of parenting variables (Kendziora & O'Leary, 1993). The most well known research conducted in this area has been presented by a developmental psychologist, Diana Baumrind.

Parenting Style

Baumrind (1967;1971) described dimensions of child-rearing practices as consisting of two broad dimensions: control and responsiveness. The alternate combinations of high and low control and high and low responsiveness yield four parenting styles: authoritative, authoritarian, permissive, and indifferent.

Summary of Control x Responsiveness Interactions

Responsiveness	Control	
	High	Low
Responsive, child-centered	Authoritative	Permissive
Unresponsive, parent-centered	Authoritarian	Uninvolved

Most of the research conducted on these parenting styles has not included the indifferent/uninvolved parent. Authoritarian parents are controlling and unresponsive to the child's needs. They require children to abide by strict rules and child misbehavior

is typically met with severe punishment. The permissive parent is child-focused, asserts little control on child behavior, and rarely punishes the child following misbehavior. The authoritative parent allows for independence and autonomy of the child while adhering to rule enforcement and boundary setting. Following the combinations of low parental control-high child responsiveness and high parental control-low child responsiveness, it is likely that parents identified as authoritarian would have little tolerance for misbehavior and parents identified as permissive would have relatively high tolerance for child misbehavior.

Authoritative parenting provides a model of parenting that integrates the extreme child rearing practices of authoritarian (conservative) and permissive (liberal) parenting. Conversely, the authoritative model espouses both behavioral compliance and psychological autonomy as socialization goals for children so that children of authoritative parents are expected to behave in prosocial ways without prompting from the parents, to reason independently about moral problems, and to think independently (Baumrind, 1996b).

Correlational Studies

Correlational studies, while unable to make statements regarding the causality of parenting practices and child behavior, have revealed some child outcome variables that are related to parenting style. Specifically, a relation between controlling parents who are more punitive and lower on dimensions of nurturance and child involvement and children who are more mistrustful and withdrawn has been found (Baumrind, 1991). Alternatively, permissive parents who are disorganized and nondemanding have been

found to have children who are immature and low on measures of self-control and self-reliance (Baumrind, 1991).

In an observational study of preschoolers and their mothers, Baumrind (1971) found a positive, significant relation between mothers who are authoritarian or harsh in their parenting practices and aggressive children who are dependent. A significant, positive relation was also found between mothers who are permissive in their parenting practices and dependent children who are not well behaved.

Baumrind (1972) reported an exploratory study in which she conducted separate analyses with data from 15 African American girls and their families who participated in a previous study (Baumrind, 1971). Baumrind hypothesized that African American and Caucasian mothers would use different child rearing approaches and that these parenting differences would reflect the variation of the social-cultural contexts of the families. Data supported this hypothesis in that the majority of African American mothers were rated as authoritarian according to the child rearing dimensions established by Baumrind. Unlike Caucasian authoritarian mothers whose children were withdrawn and mistrustful, African American authoritarian mothers had girls who were well adjusted and socially competent. Baumrind suggested that the authoritarian child rearing practices used by the African American mothers were not perceived by the children as rejecting, but as nurturing. While Baumrind's previous data suggests that authoritarian parenting has negative effects for Caucasian children, authoritarian parenting appears to be beneficial for African American children who were better socialized as a result of this parenting style. This study provides an example of the complexity of the relation between racial/ethnic factors and parenting.

The child rearing dimensions Baumrind developed have been found to be related to negative and well-adjusted child behavior in a number of studies. Her child rearing dimensions have also provided a theoretical framework for much of the parenting literature. One limitation of Baumrind's work is that most of it was conducted with middle-class, Caucasian parents and their preschool-aged children, and thus generalizations about the parenting dimensions to parents from different racial/ethnic backgrounds is difficult. Although one study addressed child rearing styles and child adjustment among African American families, the sample was small and analyses were conducted only for girls (Baumrind, 1972).

Parenting Errors

Baumrind's work also made an important distinction between "prudent" and "imprudent" discipline (Baumrind, 1996b). She suggested that consistent, contingent discipline helps preschool-aged children develop a sense of security and the belief that the world they live in is predictable and safe. She further suggested that when parents use spanking prudently as a disciplinary practice, the child learns socially constructive behavior that will generalize to interactions outside of the home. However, when parents disapprove of the use of physical punishment, they are at risk for using it impulsively and explosively during times of stress. For example, if a child were to do something dangerous such as run into the street and the parent unexpectedly responds by using severe physical punishment, the child is less likely to learn the important lessons of socially constructive behavior (Baumrind, 1996a). Further study must determine the particular situations in which lenient parents lose their "laissez-faire" approach to child rearing.

Generally, parenting mistakes such as imprudent discipline occur when a parent uses a discipline/reprimand technique or a strategy that is ineffective in changing their child's behavior (O'Leary, 1995). Lee and Bates (1985) reported that parent-child interactions between parents and their normal preschool-aged children include 3 to 15 conflictual interactions an hour. These data suggest that parents have many opportunities for learning dysfunctional parenting techniques, such as inadvertently reinforcing negative behavior. It also suggests that parents have multiple opportunities to practice effective techniques. O'Leary (1995) has found parental discipline mistakes and young children's misbehavior to be highly correlated. One example of a discipline mistake is lax parenting in which the parent enforces few rules. Some examples of lax discipline include poor monitoring of child behavior, laughing at child misbehavior because it is "cute," attempts to distract the child during misbehavior, and premature termination of time-out.

Reid, O'Leary, and Wolf (1994) reported that mothers who try to distract their child while the child is misbehaving are less effective. They found that when distraction does not work, mothers reprimand their child and the child becomes upset with this change in tactics. They also found that children who are consistently reprimanded from the beginning of an episode of misbehavior do not get as upset.

Parental Perception of Behavior

At some point parents of clinic-referred children decide that their child's behavior is so severe they must seek treatment. When parents decide that their child's behavior requires treatment, they have little tolerance for the behavior that the child is displaying. There is evidence that some children referred for disruptive behavior problems display

rates of deviant behavior that are similar to the amount of disruptive behavior shown by non clinic-referred children (Delfini, Bernal, & Rosen, 1976; Lobitz & Johnson, 1975). These findings suggest that parental perception may be important in determining whether a child has a “problem” that requires clinical intervention. Because parents have an important role in the referral of children for clinical services, the validity of the information presented by parents regarding the severity of the child’s behavior problems should be considered. For children who display clinically significant rates of disruptive behavior, parental perceptions for that child’s behavior should not be ignored as they likely play an important role in the development of the child’s behavior problems.

Family Coercion Model

Patterson’s family coercion model (1976, 1982) attempts to explain the development and maintenance of child conduct disorders by suggesting that cycles of reciprocated aggression between parents and their children are established when parents reinforce child aggressive behavior. This cycle is driven by parents ignoring appropriate and positive child behavior, selectively attending to negative child behavior, and overreacting to negative child behavior. As this negative cycle continues, the child’s misbehavior is likely to become more frequent and more aversive. If the parental response to the aversive behavior involves inconsistent parenting or withdrawal, the child’s negative behavior becomes inadvertently reinforced by the parent. This model of dysfunctional parent-child interaction has been supported by behavioral observation studies conducted in the homes of families (Patterson, 1982).

Early in the coercive cycle, parents begin to attend selectively to negative child behavior and to overreact to this behavior. The cognitive process that lowers parental

tolerance for negative behavior became the focus of a recent study by Baden and Howe (1992). Baden and Howe reported that cognitive factors influence the likelihood that a parent will continue to initiate and maintain cycles of reciprocated aggression with their child. These cognitive factors include parents' perceptions of themselves (e.g., their ability to control their child's behavior), their children (e.g., belief that misbehavior is intentional), and parental cognitive sets of blame and helplessness. The authors used Patterson's family coercion model (Patterson, 1976; 1982) as a paradigm for their investigation into the relation between parental attributions for the causes of child misbehavior and expectancies for the effectiveness of parenting techniques with their own conduct disordered children and in general. Baden and Howe found that mothers who reported their adolescent children had more behavior problems as rated on the Eyberg Child Behavior Inventory (ECBI; Eyberg & Pincus, in press), were also more likely to report that these behaviors were intentional and due to stable, global factors beyond the control of the parent. Baden and Howe suggested that parents of conduct-disordered children hold a cognitive stance of blame and helplessness that contributes to the aversive parent-child interactions described in Patterson's family coercion model.

In summary, the parenting literature suggests that a parent's response to child behavior has an impact on the quality of the parent-child interaction. A bias for perceiving child misbehavior as intentional and a tendency to attend more to negative child behavior was related to a higher frequency of negative child behavior.

Parenting Measures

An important way to assess parent perceptions, beliefs, and attributions is through self report measures. There are many parenting measures available but the literature does

not describe any measure of parental tolerance for misbehavior. Holden and Edwards (1989) provided a review of the many parenting measures available. They reported that 83 parent attitude questionnaires were developed between 1899 and 1986. In particular, Holden and Edwards found that most measures used vague or ambiguous items and that parents often become confused when responding to these items. This ambiguity is enhanced by the use of third person wording for the items, not specifying the age of the child about whom the measure is asking, and including items that deal with developmental stages the child has not yet reached. Of the measures in existence, Holden and Edwards reported that only 11% of the measures were developed specifically in response to a clinical need; they also found that few studies provided adequate evidence of reliability or validity. Regarding reliability, only 11% of the 83 measures provided test-retest and internal consistency data; validity data were available for 43% of the parenting measures. Holden and Edwards suggested that obtaining information concerning global attitudes of parenting is not useful in predicting behavior and that measures must be specific and place the attitudes in context. In addition, these authors called for future parenting measures that are behaviorally based and situation specific, have good psychometric properties, and provide normative data. Holden and Edwards also highlight the need for research that provides models for how parents categorize child actions, anticipate misbehavior, form attributions, solve problems, and make decisions.

Available Measures

Currently, there are no measures of parental tolerance for misbehavior in existence, but there are some measures that address related constructs. These related constructs include parents' developmental expectations for young children (Fox, 1992; Rickard,

Graziano, & Forehand, 1984), dysfunctional parenting (Arnold, O'Leary, Wolff, & Acker, 1993), and preferred discipline techniques (Rickard et al., 1984).

Rickard et al. (1984) developed a measure of maternal awareness of child developmental norms, preferred disciplinary techniques, and strategies for regulating behavior. The Maternal Expectations, Attitudes, and Belief Inventory (MEABI) is a 67-item self report measure given to 104 mothers of preschool aged children. The MEABI consists of five major scales including the Maternal Awareness of Child Development Norms, Maternal Need for Approval, Maternal Reactions to a Child's Deviant Behavior, Maternal Beliefs about Child Management and Guidance, and a Should-and-Should Not scales. Of the MEABI scales, the Should-and-Should Not scale appears to be most closely related to the construct of tolerance as it measures maternal beliefs about the appropriateness of certain behaviors. Limitations of the MEABI include the low test-retest reliability of the Should-and-Should Not scale (.44) and the lack of evidence from a factor analysis that the measure assesses five separate aspects of parenting.

One well standardized measure of parenting is the Parenting Scale developed by Arnold, O'Leary, Wolff, and Acker (1993). This is a 30-item self-report measure that was found to provide three reliable factors representative of mistakes made by mothers of 2- to 4-year-old children: laxness, overreactivity, and verbosity. Laxness is defined as a parent's tendency to provide positive reinforcement for negative behavior and failure to follow through on commands and discipline. Overreactivity is defined as a parent's anger, meanness, and irritability towards their child. Verbosity is defined as the parent's tendency to use reasoning and lengthy verbal interactions with a child about their misbehavior when talking is ineffective. This measure has been found to be reliable,

(Laxness, .83; Overreactivity, .82; Verbosity, .63; and Total score, .84) and the factors are consistent with other theoretical formulations of parental discipline such as Baumrind's dimensions of child-rearing. One limitation of this measure is that the three factors accounted for only 37% of the scales' variance. The measure also does not provide information on parenting practices with older children.

The area of parenting encompasses a large literature base. Although it is known that the most frequent discipline mistake made by Caucasian parents in response to aggressive and oppositional child behavior is harsh and overreactive discipline, little is known about how parents from other cultures define and respond to behavior that Caucasian parents define as undesirable (O'Leary, 1995). It is also unclear whether the identified parenting mistakes of laxness, overreactivity, and verbosity apply for school aged children as most of the research to date has been conducted with preschool-aged children. Thus, there is a need for further study in the area of punishment (Kendziora & O'Leary, 1993). Specifically, more information is needed about how misbehavior is unintentionally encouraged in children and what standards parents use to define behavior as inappropriate.

Variables That Affect Parenting

It has been noted that while some parents do not know how to deal with their child's behavior, there are some mothers who know proper parenting techniques but fail to use them (O'Leary, 1995). Failure to apply child rearing knowledge to real life situations can be affected by maternal depression and stress as these variables have been found to have an influence on parenting behaviors (Wahler, 1980; Abidin, 1990; Gelfand & Teti, 1990).

Maternal Depression

In a review of the literature targeting the effects of maternal depression on children, Gelfand and Teti (1990) stated that it is important to study the parenting skills of mothers who are depressed because women have a greater likelihood of developing depression relative to men, and because women are most often the primary caregivers for children. They also highlighted the fact that children may be exposed to stress and dysfunctional parenting even after a mother's initial depression lifts because residual symptoms such as anxiety, dysphoric mood, inadequate social supports, and marital problems often persist.

Previous research on the parent-child interactions of depressed mothers describe the mothers as hostile, critical, rejecting, emotionally withdrawn from the child, and as having unrealistically high expectations regarding the child's behavior (Weissman, 1983; Weissman, Paykel & Klerman, 1972). Depressed mothers have also been found to have poor marital relationships and unorganized lifestyles (Susman, Trickett, Iannotti, Hollenback, & Zahn-Waxler, 1985).

Gelfand and Teti (1990) reported that depressed mothers often have pessimistic perceptions of their child's behavior. Panaccione and Wahler (1986) provided evidence for the theory that depressed mothers tend to view their children in a harsh manner. Their study found that judgments made by a sample of distressed mothers about their children had little relation to how the child actually behaved. Rather, the maternal judgments were best predicted by the mother's depression, the mother's coercive interchanges with other adults, and the mother's observed aversive responses to her child.

Gelfand and Teti (1990) suggested in their review that depressed mothers tend to provide their children with inept discipline in that they provide unstable amounts of

control for their children, often varying from lenient discipline techniques to overly harsh parenting. They describe depressed parents as either avoiding discipline and utilizing a permissive and apathetic stance towards their children or frequently using harsh physical and verbal discipline.

Susman et al. (1985) studied the child-rearing attitudes of Caucasian mothers diagnosed with current major depression, past major depression, current minor depression, or past minor depression. A sample of mothers with a history of physically abusing one of their children and a sample of control mothers were included in the study as well. They found that mothers with a history of abusing their children reported the use of authoritarian control, inconsistent discipline, anxiety-induction, and guilt-induction as discipline techniques significantly more often than parents from the other groups. Mothers from the abuse group also reported using significantly less rational guidance and they reported less enjoyment in their parental role relative to the other groups. The authors concluded that the parenting problems associated with abusive mothers include global problems of perceived motives of the child and goals that mothers have for their children's socialization.

In follow-up analyses, Susman et al. (1985) conducted an item by item comparison of their child rearing measure. This analysis revealed that mothers from the "current depression" group were more likely than mothers from other groups to express feelings of disappointment and use guilt-inducing and anxiety-inducing techniques for changing their children's behavior. Mothers with current depression reported that they were concerned with the impression that their children made in public but, relative to the other groups, they reported that they would be unlikely to encourage their children to behave better

when in public. Analysis of the mothers with past depression revealed that their parenting was very similar to the normal sample of mothers. The authors suggested that the problems that previous research has found to be associated with depressed mothers and their parenting skills may be related to the depressed state and not any stable personality traits of individuals who experienced depression. Correlational analysis of the relation between SES and self reported parenting revealed that mothers with lower SES were more likely to use authoritarian control and anxiety induction to get their children to behave according to their rules (Susman et al., 1985). The higher SES mothers were more likely to express affect openly and use rational guidance to illicit behavioral compliance from their children.

In summary, the Susman et al. (1985) study suggests that parental depression, parental history of abusing their children, and low SES are all risk factors for dysfunctional parenting. This study is important because it attempts to illustrate the relations and influences of SES, depression, and child abuse. Limitations of the study are that cultural variables were not addressed and that the number of mothers in each group was not large.

Wahler (1980) studied the influence of maternal "insularity" on treatment outcome among 18 clinic referred mother-child dyads. In each of the dyads, the child was clinic referred for oppositional behavior. Previous research (Wahler, Leske, & Rogers, 1979) revealed that insular mothers can be described as mothers who have few daily interactions. Mothers classified as insular are typically from low SES backgrounds, have few interactions with friends, report that most of their interactions are with relatives or helping professionals, and rate these interactions as aversive. Noninsular mothers were

found to have an average of 9.5 interactions (positive to neutral) per day while the insular mothers reported an average of 2.6 (aversive) interactions per day.

Wahler's (1980) observational data indicated that although treatment significantly decreased insular mother's yelling and screaming and child noncompliance, these changes were not maintained over time as both mother aversive behavior towards the child and child noncompliance rose to pretreatment levels at one year follow-up. Mothers' aversive reactions to child behavior was inversely correlated with friendship contacts (i.e., mothers with more aversive reactions to child behavior had fewer friends). This relation was highly predictive of mother report of child behavior and highly consistent over time. These results suggest that the number of maternal extra-familial contacts have direct or indirect effects on child rearing. It is possible that contact with friends' children helps a mother put her own child's behavior in perspective, thus increasing her tolerance for child misbehavior. Alternatively, maternal tolerance for child behavior may be decreased through exposure to her friends' children as a function of increased irritability or disappointment in her own child's behavior.

To summarize, the literature dealing with the parenting of depressed mothers suggests that psychopathology can adversely affect a parent's ability to monitor and discipline her child. There is also some evidence that children of depressed mothers are at risk for behavioral and adjustment problems. Methodological problems include the inconsistent operational definition of depression across studies, and the use of self-report measures exclusively with these often biased, depressed participants.

Maternal Stress

Abidin (1990) stated that attention must be given to parent-child interactions to understand stress and parenting as each parent-child dyad is influenced by a complex exchange between the child, parent, and situation. In a review of the parenting and stress literature, Mash and Johnston (1990) described parenting stress as a complex construct involving the behavior, cognitions, and affective components of parent-child interactions. Stressful parent-child interactions typically involve the absence of positive interactions and high levels of control-oriented discipline associated with the authoritarian parenting style (Baumrind, 1967;1971). Much like parental tolerance for misbehavior, stress should be viewed as a dimensional construct in that it is present to some extent in all families. Although parenting can be a stressful task, large amounts of daily life stress do not necessarily lead to dysfunctional parenting (Abidin, 1990). Alternatively, well-adjusted parents with less perceived stress may have difficulty performing their parenting roles (Kendziora & O'Leary, 1993).

Mash and Johnston (1990) reported that many children with behavior problems come from families with a host of stressful influences including maternal depression, paternal alcoholism, significant life stress, marital conflict, and social isolation. Family size may also be an important variable for the development of parenting stress; O'Brien (1996) found that the daily parenting hassles encountered by middle class mothers were proportional to the number of children in the household. Specifically, stress increased significantly when the family included more than one child.

Mash and Johnston (1990) reported a difference in the stressful parenting interactions between hyperactive children and children who are physically abused by their

parents. They suggested that in families with hyperactive children, the child is the main source of stress in parent-child interaction such that situational and parental characteristics are secondary in importance. According to Mash and Johnson, there is little evidence that child misbehavior precedes parental abuse of their children. In abusing families, parental characteristics and environmental characteristics are the main sources of stress for parents. Although no research has tested this specific distinction between the source of stressful parent-child interactions for families with a hyperactive child and families with physical abuse, Mash and Johnson propose that differences between the interactions of these families suggests multiple pathways to the development of parental stress.

Research highlights the influence of maternal affective states and marital conflict on the development of stressful parent-child interactions (Jouriles, Pfiffner, & O'Leary, 1988). In a study of 60 mother-child dyads including non clinic-referred preschoolers, Jouriles and colleagues found that marital discord was related to the amount of behavior problems displayed by the boys and girls in the sample. Marital conflict was also related to the number of disapproving statements mothers made towards their children after they misbehaved. This study suggests that marital conflict can negatively influence a parent's tolerance for child misbehavior. The results also suggest that marital conflict may be another pathway to the development of behavior problems among children.

Child Abuse and Parenting

A review of the child abuse literature is important for this study as parents who abuse their children frequently define their child's behavior as undesirable and respond

with severe reprimands or punishment. Parents who physically abuse their child are extreme examples of parents who become intolerant of child behavior.

Twentyman, Rorhbeck, and Amish (1984) provide a social information processing model for abusive parenting. This model proposes that parental interpretation of the meaning of a child's behavior is the first step in the abusive model. Next, the parent makes (often negative) attributions for the child's disobedient behavior, and these attributions are associated with parental anger. In the next step, parents choose a response to the child's behavior. Twentyman and colleagues suggest that abusive parents at this step tend to use poor problem solving and tend choose corporal punishment in response to the child's disobedient behavior.

Bauer and Twentyman (1985) conducted a study in which three groups of mothers were compared on their responses to audio taped records of stressful parent-child interactions: a) mothers with a documented history of child abuse, b) mothers with a documented history of child neglect, c) and control mothers. Mothers listened to a recording of a man reading a vignette in which a child has just misbehaved with others present, a child becomes angry because he or she did not get his or her own way, a child just got hurt and is crying, or a child is crying for some idiosyncratic reason. The end of each vignette included the same recording of a child crying. Mothers indicated how annoying they found the child by pushing a lever that provided ratings on a 7-point Likert scale. This lever was continuously recorded by a kymograph and provided scores for the mother's reported amount of annoyance, peak annoyance, latency to annoyance, and latency to peak annoyance. Mothers also answered questions following the vignette regarding their attributions for the child's crying. In this study, abusing mothers were

significantly more likely to rate the child as annoying the parent on purpose for all vignette situations (except for the vignette where the child is crying because they hurt themselves) relative to the other two groups of mothers. Abusing mothers were found to be hyper-responsive to the vignettes in that they had higher peak annoyance compared to the other two groups. Although abusive mothers responded with greater intensity to the vignettes, their latency to annoyance was similar to the other two groups. Situational factors appeared to moderate annoyance responses as no mothers indicated annoyance when the child cried because they were hurt.

The above study suggests that situational factors, parental attributions, and behavioral responding to child behavior are interconnected in a complex system. The study supports Twentyman's model of child abuse and suggests that therapeutic interventions with abusing mothers should target their cognitions, attributions, and unrealistic expectations for their children. Because mothers indicated how annoyed they were with the child's behavior in the vignettes, they were reporting their tolerance for the child's behavior. By having mothers report their tolerance by pushing a lever, this study measured maternal tolerance for the vignettes in an indirect way. It is not known whether parents would be able to respond to more direct and face valid measures of their tolerance for child behavior.

Haskett, Scott, and Fann (1995) investigated the validity of the Child Abuse Potential Inventory (CAP Inventory), a screening tool for physical child abuse using a small sample of highly distressed mothers with a history of physically abusing their children. They addressed the concurrent validity of the measure by evaluating the relation of maternal report on the CAP Inventory to high risk factors for child abuse including

negative parental distress, poor problem solving, use of harsh discipline, and poor child adjustment. Haskett and colleagues found that parents with high scores on the CAP Inventory had significantly more negative parenting behaviors in a behavioral observation play situation relative to parents who scored below the clinical risk cut-off score on the CAP Inventory. Parents who scored above the CAP Inventory clinical risk cut-off score reported a significantly greater number of child behavior problems as measured by the Child Behavior Checklist (CBCL; Achenbach & Edelbrock, 1983) relative to parents below the clinical range of the CAP Inventory. Notably, no significant relations were found between maternal report of child behavior problems and teacher report of behavior problems for the same children.

In this study, Haskett et al. reported that teachers rated the children as having a greater number of behavior problems than did mothers and the relation between teacher and mother ratings was nonsignificant. This study supports Mash and Johnston's (1990) suggestion that broader assessment techniques targeting abuse potential should be used in the evaluation of child abuse because self report and interview data from the parent may not provide the clinician with enough information. This suggestion is relevant to the study of tolerance because parental tolerance for child misbehavior may prove useful in predicting child abuse potential given data for normal and abusive samples.

Culture and Ethnicity

Cultural values may influence parents' tolerance for misbehavior through the way parents interpret their children's behavior and how they choose to respond to behavior. It can be argued that those behaviors that are defined as child behavior disorders depend not only on the abnormal behavior itself but also on cultural values for determining what is

the norm for children and what is not. Baumrind (1996a) suggests that the cultural context has a great deal of influence on the acceptability and consequences of parental discipline. She further states that child rearing research should address how parents generate optimal child outcomes within the context of the values of a particular culture.

Forehand and Kotchick (1996) call for more research addressing parent and child behavior in ethnic minority families because little is known about the influence of cultural values on parenting behavior. There is a clinical need for information regarding the way different racial/ethnic groups define problem behavior because current behavior therapy research does not address the influence of cultural variables on parenting behavior. Specifically, Forehand and Kotchick state that "we need to know if behaviors such as aggression and noncompliance are viewed as equally problematic in particular ethnic groups as they are by European American parents (Forehand & Kotchick, 1996)." They further state that if behaviors typically viewed by European American parents are not viewed as annoying to racial/ethnic minority parents, then racially diverse parents are less likely to be invested in changing these behaviors through traditional behavioral parent training.

Early research exploring the relation between culture and parenting compared minority parents, their children, and cultural environments to Caucasian populations. The framework for these early studies was one in which parenting differences displayed by the non-Caucasian parents were viewed as deficits and remedial work was recommended for the minority parents. Typically, these early studies confounded SES with ethnicity and the resultant data creates difficulty in making sound conclusions about minority parenting (Garcia Coll, 1990). Most research that has been done with minority families has

included small samples of African Americans and Hispanics. Little research has been conducted with Native American and Asian American populations (Garcia Coll, 1990).

Several differences characterize minority families compared to Caucasian families. For example, minority families are typically described as extended rather than nuclear and more conservative in parenting practices, values, and sex roles (Powell, Wyatt, & Bass, 1983). Minority children are also more likely to be raised without a father in the home; 1990 US census data reveals that 44% of African American children nationwide were reported as living in a married-couple household and 50% of African American children nationwide were reported as living in a female headed household, compare these figures to those of Caucasian families in which 80% and 16% of Caucasian children nationwide were classified as living in a married-couple household and a female headed household, respectively (United States Census Bureau, 1997). In addition to female headed households, some minority groups have a higher incidence of teenage mothers who are primary caregivers for their children. Specifically, African American teens (24%) and Hispanic teens (18%) have higher rates of teenage pregnancy when compared to Caucasian, non-Hispanic teens under the age of 20 (10%) (Garcia Coll, 1990).

One model proposed to explain how culture affects parenting behavior uses a cultural-ecological view of child development (Ogbu, 1981). Ogbu presents a model in which the micro setting of the family provides the socialization children will need for their economic, political, and social roles as competent minority adults. The child rearing practices parents use in these micro settings are part of a culturally organized system that is influenced by both the immediate environment (e.g., environmental resources) and the larger cultural context (e.g., culturally derived folk theories of child rearing).

Hispanic Parenting

Hispanic Americans are the largest growing minority group in the country and they currently comprise approximately 8% of the US population (Garcia Coll, 1995). Research supporting this model suggests that Hispanic parents draw upon their cultural and socioeconomic backgrounds when determining which beliefs and behaviors they will use to socialize their child's behavior for school and home (Zayas & Solari, 1994). Because parents from ethnic and racial minority groups have backgrounds that differ from the majority culture, the developmental goals they have for their children are culturally determined and are likely to differ from those perceptions and behaviors of majority group parents (Garcia Coll, 1990). For example, research suggests that Puerto Rican and Mexican mothers have high expectancies for their children to be obedient, to conform, and to follow rules in the classroom. These data are compared to Caucasian teachers and mothers who prefer their children to be independent, self-directed, and comfortable with verbal expression (Okagaki & Sternberg, 1993; Ortiz-Colon, 1985).

It is thought that racially/ethnically diverse families develop adaptive strategies, or observed social behaviors, that help the family survive from one generation to the next (Ogbu, 1981). These adaptive strategies are competencies that are adopted from cultural knowledge. They become the socialization goals that parents have for their children which are believed to pass from older adults to children. An example of a child rearing practice that incorporates these goals is the insistence that children conform to parental and extended-family authority common among Hispanic families. This conformity ensures greater family relatedness and minority identity development (Zayas & Solari, 1994).

Low SES Mexican American parents tend to use child-rearing techniques that are similar to low SES Caucasian and low SES African American parents. However, the Mexican American mothers report that their socialization goals are different relative to Caucasian and African American mothers in that they emphasize less individual responsibility and a smaller achievement orientation (Durrett, O'Byant, & Pennebaker; 1975).

Lassiter (1995) reported that discipline among Mexican Americans is typically conducted by the father and that common methods of discipline include scolding, shaming, promises, and threats. Others, however, have reported that joint parental decision making and discipline has been increasing in modern Hispanic American families (Garcia Coll, 1995).

African American Parenting

African Americans are currently the largest racial/ethnic group in the country, comprising approximately 12% of the US population (Garcia Coll, 1995). A review of the literature regarding African American parenting does not provide conclusive evidence for racial differences in parenting between Caucasian and African American parents. Rather, the studies are more descriptive of African American child rearing and point to variables that appear to influence parenting among mothers from this group.

Ogbu (1985) describes a culturally derived child rearing practice utilized by African American parents from poor and dangerous urban communities in which parents instill emotional independence and self-sufficiency in their children because it improves the likelihood that the child will survive life in this dangerous environment. Specific examples of these parenting practices documented among low SES families include

inconsistent demands for obedience, the use of verbal criticism, and physical punishment (Ogbu, 1981). The literature in this area further reports that African American parents often socialize their children to respect, obey, and learn from the elders in the community (Garcia Coll, 1995).

In a recent review of the multicultural parenting literature, Lassiter (1995) reported that SES plays a large role in the parenting practices of African American families as middle class families tend to be less authoritarian and more liberal than families from lower SES backgrounds. African American parents from lower SES backgrounds have been found to use more physical punishment relative to parents from higher SES backgrounds who were found to use more verbal punishment (Lassiter, 1995). Others have reported that there is a wide range of child rearing practices used in African American parenting and that disciplinary practices are influenced by parental education, social support, neighborhoods, and religious affiliation (Garcia Coll, 1995).

A study conducted by Heffer and Kelly (1987) addressing parenting attitudes of middle and lower class African American and Caucasian parents found that a significantly greater number of both middle and low SES African American mothers accepted spanking as a disciplinary technique relative to middle SES Caucasian mothers. Among the low SES African American mothers, time-out was not rated as a desirable method of discipline.

Deater-Deckard, Dodge, Bates, and Pettit (1996) reported that a correlational analysis of parenting practices among a sample of African American and Caucasian mothers revealed a race effect for the relation between parents' physical discipline and children's externalizing behavior. Parents' use of more harsh physical punishment was

related to greater child disruptive behavior in the classroom for the Caucasian group but not the African American group. The authors suggested that the developmental process for child behavior problems may be different for the two racial groups. They further suggested that harsh punishment may imply a parent-centered, authoritarian style for Caucasian families but may be perceived positively by African American families.

Religion

It has been suggested that African American religious participation provides the family with social support, organization for the family, and adaptive ways to cope with stress (Brody, Stoneman, Flor, & McCrary, 1994). Some research suggests that religious beliefs in African American mothers predict parenting practice. Brody et al. (1994) conducted a correlational analysis of 90 rural African American families with children between the ages of 9 and 12 years old. Brody and colleagues used behavioral observations of families playing a game as well as observations of marital interactions. Mothers and fathers also completed several self-report measures including measures of parenting, formal religiosity (frequency of church attendance and the importance of church attendance), and co-caregiver conflict. Path analyses revealed that links between self reported religiosity and observed parent-youth relationships were mediated by observed marital interactions and self report for co-caregiver relationships.

Based on bivariate correlations, the authors suggested that higher marital interaction quality was significantly associated with low amounts of inconsistent parenting for mothers and fathers. Higher maternal and paternal reported levels of co-caregiver conflict was significantly associated with more frequent occurrences of inconsistent parenting. High maternal formal religiosity was associated negatively with inconsistent

parenting and co-caregiver conflict. Maternal religiosity was associated positively with marital interaction quality. Paternal religiosity was negatively associated with co-caregiver conflict. Although the results of this study suggest that religiosity plays a role in the parenting and parent-youth interactions of African American families, some caution must be used when interpreting these data as formal religiosity was measured by two items and the resulting score was multiplied for use in the analyses.

In a correlational analysis of questionnaire data from 42 low SES mothers of 3 to 6-year-old African American children, Kelley, Power, and Wimbush (1992) reported that maternal education, father absence, maternal age, and religious beliefs were associated with maternal disciplinary styles among this sample. Kelley et al. were interested in the discipline practices of these mothers, and they provided correlational data regarding the factors associated with parent-oriented discipline versus child-oriented discipline. The results suggested that the younger, single mothers of this sample placed more emphasis on obedience and parent-directed discipline whereas the older, married mothers emphasized autonomous behavior in their children and used more democratic, child-oriented disciplinary practices. Kelley et al. reported that African American mothers who rated high on an intellectual scale of religiosity (measuring knowledge of biblical events) were more child-oriented in their discipline practices. This result is somewhat spurious as the significant relation was only found for one out of five scales of the religion measure.

Kelley et al. call for future research addressing the frequency and the circumstances under which physical punishment and power assertive practices are used by racial/ethnic minority parents. In general the results from this study must be reviewed with caution as

the five measures had low reliability, one of the measures had only one item, and data were collected from a small sample size.

Reis, Barbera-Stein, and Bennet (1986) conducted a survey of the ecological model of parenting that included self-report of child rearing variables by Caucasian and African American mothers. Reis and colleagues found that parents who were punitive in their parenting practices were also less knowledgeable of child development, were more depressed, and had fewer social supports. Reis et al. did not find a significant age effect for parenting skills. Their results included a significant race effect for parent's attitudes towards child rearing and knowledge of child development in that black pregnant women with no other children had the lowest knowledge scores of child development relative to groups of black women with children, white women with children, and white pregnant women with no other children. Reis et al. do not report whether the black pregnant women were younger than the other groups in the study so it is unclear whether the group differences were due to an age effect.

Asian Parenting

Less research had been conducted in the area of Asian parenting relative to African American and Hispanic parenting. The research shortcomings of the previous two domains is also apparent in this area as well. One reason for the dearth of information available for Asian parenting is that the term "Asian American" can include a number of different cultures including Chinese, Japanese, Korean, Vietnamese, Thai, Filipino, and Laotian to name a few (Garcia Coll, 1995).

Hackett and Hackett (1993) reported differences between Gujarati Indian and English parents' attitudes towards the behavior of their children. Based on survey data,

Gujarati parents reported significantly less tolerance for physical aggression, temper tantrums, bedwetting, and disobedience relative to the English parents. English parents, however, had significantly less tolerance for lying relative to the Gujarati parents. The investigators found no differences between parents from the two cultures for self care or physical independence items.

Weisz, Suwanlert, Chaayasit, Weiss, Walter, & Anderson (1988) asked Thai and American parents to read a vignette about a child with overcontrolled problems (e.g., shyness, fear) and a child with undercontrolled problems (e.g., disobedience, fighting). Parents were asked to make judgments about the seriousness of each child's problems. The Thai parents rated the problems of each child as less serious and less worrisome than did American parents. Weisz et al. proposed a threshold model of cultural influence in which culture sets parents' thresholds for distress over child problems. The authors suggest that Thai parents may tolerate a wide variety of child behavior because of the optimism and belief that change is inevitable; these features are the basic tenets of Thai Buddhism.

Lassiter (1995) reported that although Chinese American fathers traditionally assume the role of disciplinarian in the family, both mothers and fathers assume the responsibility for their child's behavior. First-generation Chinese American and Korean American parents have been reported to use authoritarian standards to discipline children, which may include spanking. Chinese parents approach child rearing from a different perspective than Caucasian parents in that they view themselves as teachers for their children (Kelley & Tseng, 1992). Education, child behavior, and discipline are central concerns for their roles as teacher. Traditional Chinese parents could be described as

preferring an authoritarian parenting style. The disparity between the authoritarian parenting style displayed by traditional Chinese parents and the authoritative parenting style valued by Caucasian parents in the United States is an example of how the preferred parenting style of the mainstream perspective, or emic, culture can view the valued parenting style of individuals from another culture as undesirable (Baumrind, 1996b).

Kelley and Tseng (1992) studied the child rearing practices of 38 middle class immigrant Chinese mothers in the United States and 38 middle class Caucasian mothers. The data for this study were obtained by questionnaires including a measure of parenting dimensions. A main effect for culture was found in that the Caucasian mothers scored significantly higher on indices of nurturance, responsiveness to child input, nonrestrictiveness, consistency, and rule setting. The Chinese mothers reported significantly more use of physical punishment and harsh scolding. The Chinese parents from this sample appeared to rely on traditional methods of socialization when parenting their children. This study demonstrates that culture has an effect on child rearing practices and as the Chinese and American parents were similar in SES status, the effects can be attributed more directly to culture.

Minority parenting is a difficult topic to describe briefly because there are countless racial/ethnic groups to choose from. Research in this area is difficult to conduct as the relation between acculturation, SES, and racial/ethnic background must be carefully assessed to make accurate conclusions regarding the impact of these variables on parenting. Although it is important to consider race when describing a parent's child rearing practices, it is also important to recognize that degree of acculturation, SES, and degree of ethnic identity are potential moderating variables that may affect parenting

behaviors. Further research is needed to address the interactions that contribute to parenting behavior within individual cultures (Forehand & Kotchick, 1996).

One pitfall of research in this area is that simply classifying an individual as a member of a racial/ethnic group can be misleading. For example, a parent who reports that she is "Black" may have family origins in Africa, the West Indies, or a South American country so that the members of a "Black" racial group may include individuals from very different cultural backgrounds.

The existing research on minority parenting reflects the difficult nature of study in this area. Some of the methods used to investigate minority parenting are not as robust as studies from the general parenting literature. Specifically, studies of minority parenting can be characterized by small sample sizes, reliance on correlational analyses, and the use of measures with poor psychometric properties (Heffer & Kelly, 1987; Kelley et al., 1992; Kelly & Tseng, 1992; Brody et al., 1994). Thus, the conclusions made from some of these studies should be taken with some caution.

Socioeconomic Status

Research has found SES to predict a number of biological and social factors including chronic stress, prenatal status, inadequate social support, and maternal desperation (Parker, Greer, & Zuckerman, 1988).

Early studies of African American parenting reported that African American parents use harsh discipline in order to develop obedience and respect in young children (Peters, 1981). However, in a more recent study, Dodge, Petit, and Bates (1994) suggested that these harsh disciplinary practices may be accounted for by SES rather than race. Dodge and colleagues associated low SES with increasing harsh discipline, less cognitive

stimulation, less maternal warmth, greater exposure to aggressive adults, greater maternal aggressive values, greater family life stressors, less maternal social support, and greater peer group instability.

Dodge et al. also found that any race differences in the amount of teacher-nominated and peer-nominated conduct problems among a sample of kindergarten children could be accounted for by SES, and that SES operated independent of any race effect. The relation between SES and child behavior problem scores did not differ significantly across gender or race groups. After SES was taken into account, African American children were found to have greater exposure to violence, maternal aggression, and less cognitive stimulation relative to Caucasian children.

Jackson (1997) suggested that literature in which greater externalizing behavior problems were found among African American boys relative to Caucasian boys misrepresents the functioning of African American families by failing to take relevant factors into account. Among the external factors listed by Jackson are poverty, lead poisoning, environmental toxins, and ineffective discipline techniques used by teachers for classroom misbehavior. All of these factors are related to SES in some fashion.

It is thought that the economic difficulties associated with low SES are stressful for parents and that lack of social support can lead to decreasing quality of parenting, which can ultimately lead to chronic child behavior problems (Dodge et al., 1994). Notably 46% of African American children and 40% of Hispanic children officially live in poverty compared to only 13% of Caucasian American children (as cited in Forehand & Kotchick, 1996).

Peterson, Ewingman, and Vandiver (1994) examined the responses of low-income mothers to vignettes describing common child rearing challenges. Using a structured interview format, they found that maternal report of their typical disciplinary strategies and anger in response to child misbehavior varied across the vignettes. Mothers reported that child behaviors that are a direct challenge to their control made them most angry and included (in decreasing order of anger provocation) disobedience, off limits behavior, defiance, and aggression. Anger was significantly related to the use of physical discipline and positively related to the perceived frequency of child behavior problems. Interestingly, different situations evoked differing amounts of anger and differing amounts of physical punishment such that the highest proportion of mothers reporting that they would use physical discipline for a vignette included only 30% of the total number of participants. This suggests that parental tolerance is likely to play a part in the severity of discipline mothers use.

Peterson et al. suggest that because disciplinary strategies are likely related to a mother's subculture, the study of middle class mothers may reveal that different child behaviors trouble them when compared to low-income mothers. Other researchers have found middle class attitudes towards child rearing to include more emphasis on verbal reasoning, nonphysical punishment, and less emphasis on authoritarian discipline techniques relative to low SES samples (Rowland & Wampler, 1983).

A more recent evaluation of middle-class parenting difficulties used the Eyberg Child Behavior Inventory and a measure of daily parenting hassles (O'Brien, 1996). In this study, 413 parents returned questionnaires that were sent to them through the mail. Results revealed a significant effect for education in that mothers with some college

education reported a significantly lower intensity of daily hassles relative to mothers with more or less education. Another education effect revealed that mothers with a high school education endorsed a need for help in significantly more areas of their life relative to mothers with a college education. The data indicated that families with one child reported a significantly lower intensity and frequency of daily hassles relative to families with two or three children. Another family size effect was found in that the frequency and intensity of parenting tasks faced by parents increases linearly with the number of children in a family. This study suggests that families with more than one child encounter more stress on a day to day basis when compared to families with only one child.

Analysis of the ECBI Problem score data revealed that parents were most concerned about their child's whining, refusing to obey unless threatened, getting angry when they don't get their own way, and refusing to eat food that is presented. These data suggest that the child behavior most middle-class parents find problematic (i.e., whining, temper tantrums, noncompliance, and food refusal) are somewhat different from the behaviors endorsed by the low income sample described by Peterson et al. (1994; e.g., disobedience, off limits behavior, defiance, and aggression).

One problem of the O'Brien (1996) study is the limited generalizability of the findings as only 35.7% of the parents returned their questionnaires. This sample also included only 2.9% non-Caucasian participants, so the specific behavior that middle class African American parents would find most problematic is still unclear. Also, because the Intensity Scale of the ECBI was not used, the actual behavior problems of the children in this sample are unknown.

Perceptions of Child Behavior

Tolan, Guerra, and Kendall (1995) argue that when the effects of an intervention are measured, one must include change in parental attributions, attitudes, beliefs, and social information-processing skills in addition to the behavioral differences typically measured after an intervention has been implemented. Parent perceptions of child behavior can be an important variable in the development of stressful parent-child interactions (Mash & Johnston, 1990). Specific maternal cognitions that can negatively influence parent-child interactions include intellectual ability, problem solving ability, psychological complexity, child rearing values, and standards for appropriate child behavior (Mash & Johnston, 1990).

Tolan et al. (1995) suggest that parenting and social-cognitive factors are related to a child's risk for developing antisocial behavior. This focus on a child's developmental-ecological context suggests that parents' perceptions of child problem behavior and the role of social context are important in the development of antisocial behavior and can be targeted for interventions designed to decrease these antisocial behaviors (Tolan et al., 1995). Parental tolerance for misbehavior is a type of parent attitude and could easily be included in treatment outcome measurement to help determine the effectiveness of an intervention.

Although the term "tolerance" has not been used in the study of parenting and child behavior to date, research has explored the related area of mothers' attributions for children's misbehavior (Dix, Ruble, Grusec, & Nixon, 1986; Dix, Ruble, & Zambarano, 1989; Dix & Lochman, 1990; Johnston & Patenaude, 1994). The social-cognitive study of mother's attributions for children's misbehavior presents evidence suggesting that the

manner in which a parent interprets a child's behavior influences subsequent parenting behavior, discipline, and ultimately, child outcomes (Johnston & Patenaude, 1994). This research further suggests that parents' attributions for children's misbehavior are related to parenting practices (such as discipline) and characteristics of the child. Age is an important child characteristic as parents perceive older children as having more control over their behavior than younger children (Dix et al., 1986). Parents of older children also attribute misbehavior to external situational factors. For difficult children, parents attribute child misbehavior to negative personality characteristics and tend to hold the children responsible for their misbehaviors (Baden & Howe, 1992; Dix & Lochman, 1990; Gretarsson & Gelfand, 1988). When parents interpret a child's behavior as intentional, regardless of whether the child is a nonproblem child or a difficult child, parents report being more upset by the behavior and more likely to use power assertive discipline (Dix & Lochman, 1990; Dix et al., 1989). Research also suggests that parents alter the severity of their discipline response to child misbehavior depending on their perception of the severity of the child's transgression (Dix et al., 1989).

Johnston, Patenaude, & Inman (1992) found that young adults attributed greater control to children for their oppositional-defiant behaviors than their inattentive-overactive behaviors; this sample of university students also reacted more negatively to oppositional-defiant behaviors relative to the inattentive-overactive behavior.

Johnston and Patenaude (1994) examined the attributions of mothers with children diagnosed with Attention Deficit Hyperactivity Disorder for behaviors consistent with inattention-overactivity (IO) and oppositional-defiance (OD). Parents read scenarios of parent-child interactions and rated their reactions regarding the locus (whether the

behavior was something about the child or if it was something about other people or the situation), control (whether the child had any control over the behavior), and the stability (whether the behavior was caused by factors that are frequently present or rarely present) of the child behavior. Parents also reported whether or not they would be upset about the behavior, the extent to which they would show their disapproval, and the degree to which they would consider the child's behavior to be a problem. Consistent with their earlier study, Johnston and Patenaude found that parents interpreted OD behaviors to be more controllable and these behaviors evoked more negative reactions from the parents. Also consistent with findings from previous research, parents who imagined the children in the scenario to be older viewed these behaviors as more internal and controllable. The more internal and controllable that a parent viewed a child's behavior to be, the more likely they were to react negatively to the behavior. Significant correlations were found between parent responses to the scenarios and their report of their child's actual behavior problems as measured by the IOWA Conners' Rating Scale, suggesting that when parents' own children displayed a large number of IO behaviors they reacted more negatively to the IO behaviors presented in the written scenarios. Additionally, when parents' own children displayed a large number of OD behaviors in real life, these parents reacted more negatively to the OD behaviors presented in the scenarios. Also, the more frequently parents rated their child's behavior as OD, the more they attributed controllability over the behaviors to the child.

Thus, it appears that by asking parents to report on how upset they would be in response to a particular behavior, the extent to which they would show their disapproval or approval towards a behavior, and the degree to which they would consider the child's

behavior to be a problem, Johnston and Patenaude were assessing tolerance. Johnston and Patenaude also found these three concepts to be highly correlated which suggests that the "reaction" score they created by combining the concepts together may provide a measure of tolerance for misbehavior.

Teachers' Tolerance for Classroom Misbehavior

Although there is no research specifically addressing parental tolerance for child misbehavior, the construct of tolerance has been studied by researchers interested in teachers' tolerance for misbehavior in the classroom. Teachers' tolerance for classroom behavior has been studied extensively using an ecological framework. The ecological model gained popularity during the 1960's and resulted in a large amount of school-based research focusing on teachers and their tolerance for the behavior of their students (Safran & Safran, 1988).

According to ecological theory, an individual's perception of a child's behavior should be given equal weight to the child's actual behavior when determining if the child is "deviant" (Algozzine, 1979). Thus, deviant behavior is seen as highly relative to a particular individual's reaction to the behavior. Leach (1977) proposed that an individual's perceptions, beliefs, assumptions, attitudes, and expectations are incorporated into perceptual frameworks that are established by the individual to predict and make sense of their life experiences and the objects and people around them. Leach further posits that because these frameworks include the individual's own past experience as well as experiences reported by others, they include common group beliefs and unique beliefs. Rhodes (1967) suggested that a child is not inherently "disturbed" but that he or she is labeled deviant as a result of the reactions of adults to the displayed behavior.

Rhodes concluded that these behaviors and the child displaying them can be viewed as "disturbing" rather than disturbed. Algozzine, Mercer, and Counterline (1977) suggested that labels of deviancy become reference points for the amount of tolerance and acceptability individuals have for a particular set of behaviors.

Algozzine (1977) created a measure to judge the "disturbingness" of behaviors children typically display in the classroom. He modeled the Disturbing Behavior Checklist (DBC) after Quay and Peterson's Behavior Problem Checklist (1975) by using the same behaviors listed in the Behavior Problem Checklist items. Public school teachers, school psychologists, and university students rated "how disturbing" they found each of the behaviors listed in the DBC. Factor analysis of the data revealed that the DBC consisted of four factors: Social Immaturity (e.g., lack of self confidence, nervousness, passivity), Social Deviance (e.g., disobedience destructiveness, temper tantrums), Self Control (e.g., restlessness, hyperactivity), and Socialized Delinquent (e.g., masturbation, truancy, profane language). Based on an analysis of the mean factor ratings, Algozzine reported that behaviors from the Social Deviance factor were significantly more disturbing to teachers and university students than the behaviors from all of the other factors. Algozzine also reported that the factors of the DBC were similar to the Behavior Problem Checklist factors.

Some limitations of Algozzine's (1977) results were that the DBC asked the rater to indicate "how disturbing" they found each behavior to be "in working with children" but it is unclear whether the university students had daily contact with children and separate analyses were not made for their "real" vs. "imagined" ratings. If the DBC had been given to parents, they might have been more aware of the items on the social delinquency

factor (e.g., stays out late at night) and they might have found those behaviors to be most disturbing. Although the development of this measure was a breakthrough for the school-based tolerance literature, neither the measure, nor the method of rating disturbance of behavior problem scale items has been applied to parents.

Safran and Safran (1984) also developed an instrument that was designed to measure the construct of tolerance. The Teacher Tolerance Scale (TTS) was adapted from the Devereux Elementary School Behavior Rating Scale II (DESB II; Swift, 1982) and was designed with 11 scales based on item content. The TTS improved on the DBC in that it included only observable and school-based behaviors that are commonly displayed by regular and special classroom students.

Algozzine (1980) investigated the tolerance of regular vs. special education teachers for classroom misbehavior as measured by the DBC. Regular teachers found the misbehaviors listed on the measure to be more disturbing than special education teachers. The socially deviant factor was found to be most disturbing to both groups which supports previous findings with the measure. Algozzine concluded that these results support the ecological perspective of disturbance in that teachers have less tolerance for socially deviant behaviors because they are more destructive to a classroom's social order. Algozzine suggested that special education teachers have more tolerance for classroom misbehavior because they have more contact with classroom misbehavior than regular education teachers and, in part, because they are self selected to work with this population. Unlike special education teachers, parents who have children with disruptive behaviors do not choose to parent these difficult children and frequently they do not learn skills to deal with the difficult behavior. For these reasons, it is unlikely that parents of

children with difficult behavior will report having greater tolerance for socially deviant behavior relative to parents who have children with normal behavior.

The utility of this measure of teacher tolerance was illustrated as specific behaviors for which teachers had the least tolerance were identified. Further evidence for the validity of this measure was provided by the between group differences that were found for tolerance in this study, however, the results could have been strengthened through the inclusion of some index of behavior problems displayed by the children in both the special education and regular classes. Although teachers reported the socially deviant behaviors as most troublesome, we do not have information on how they would respond to the behaviors.

The school-based tolerance literature contributes a list of behaviors that teachers find most annoying. Specifically, teachers view socially deviant, acting out, and aggressive interactive behaviors more negatively than behaviors such as peer avoidance, teacher avoidance, confusion, failure anxiety, and need for direction (Algozzine, 1977; Mullen & Wood, 1986; Safran & Safran, 1984; Safran, Safran & Barcikowski, 1985; Coleman & Gilliam, 1983; Kedar-Voivodas & Tannenbaum, 1979; Hutton, 1984). Safran and Safran (1985) reported that teachers are not disturbed by behaviors they view as hard to manage, but rather, teachers perceive behaviors that are severe and/or disrupting to other students as most annoying. The school-based research also suggests that behaviors perceived as "boy behavior" (acting out, physically oriented) are more annoying to teachers than less active behaviors. Additionally, when a female student displays these "boy behaviors," teachers have less tolerance for the behavior than when male students display them (Schlosser & Algozzine, 1979; Algozzine & Ysseldyke, 1980).

In addition to these earlier studies of teacher tolerance for misbehavior, Rayfield (1996) found that teacher report of child misbehavior in the classroom using the Sutter-Eyberg Student Behavior Inventory (SESBI; Eyberg & Pincus, in press) and the Teacher Rating Form (TRF; Achenbach & Edelbrock, 1986) was highly variable among teachers. The researcher reported that 25% of the variance for the SESBI Intensity Scale, 50% of the variance for the SESBI Problem Scale, and 30% of the variance for the TRF was accounted for by the teacher. Rayfield found that less variance was accounted for by the teacher when there was a wider range of answers to choose from (i.e. SESBI Intensity Scale). Thus, the role of teacher variability in predicting a child's classroom behavior rating appears to be important. Specifically, it suggests that the severity of a child's rated behavior problems are influenced by who is doing the rating. This variation between teachers further suggests that teacher-specific attitudes (such as tolerance) have an influence on their perception of the child's classroom misbehavior.

These school-based studies provide guidelines for the methodology one might use when investigating tolerance but they also raise several questions. For example, can parental tolerance for child behavior be assessed in a similar checklist format? Is it possible to obtain valid reports from parents who may feel threatened and want to "save face" when they are asked to report the child behavior they find annoying? And lastly, will the findings with a parent sample be consistent with the trends from the teacher literature?

As these questions point out, parental tolerance may be subject to a variety of influences. This chapter has explained the role of several variables that may influence parental tolerance for misbehavior. Specifically, SES, race, maternal stress, and difficult

child behavior have been found to play a role in a parent's approach to child rearing. Although few in number, studies assessing constructs similar to tolerance have attempted to account for several of these factors. However, no single study has examined the full impact of these variables on tolerance to date. The present study represents an empirical first step toward defining the construct of tolerance and integrating the child behavior literature with studies of parental functioning. Together these approaches provide a more comprehensive framework for understanding the role of parent attitudes in child development.

SPECIFIC AIMS AND HYPOTHESES

Tolerance can be defined as a measurable dimension of child rearing that includes the parent's definition of undesirable behavior. The aim of this study was to develop two measures of tolerance that could be used to measure related but different aspects of the construct of tolerance: annoyance with child behavior, perceived need for punishment in response to misbehavior, perception of misbehavior as bothersome, and perceived severity of discipline used by the parent. Each of these dimensions differ between parents so that their classification of behavior and their response to perceived misbehavior can be very different. Some index of tolerance would be helpful for clinicians as measurement of this construct would enable them to account for one of the parental variables that is hypothesized to influence referral status.

Parental variables are the main focus of this study because it has been suggested that ineffective parenting is the main contributor to the development of child behavior problems and that dysfunctional parenting, not the child with disruptive behavior, should be the diagnosis and the focus of treatment (Kendziora & O'Leary, 1993). Mothers of normal children were targeted for study because it has been suggested that mothers of normal children frequently have dysfunctional parenting skills and that their children can be at risk for the development of behavior problems (Kendziora & O'Leary, 1993).

It was hypothesized that parental tolerance for child misbehavior would predict: (1) parent report for the severity of child behavior problems, and (2) child referral status.

A link between tolerance and parent report of behavior problems was hypothesized because previous research suggests that mothers whose children display a large amount of behavior problems have stronger "reactivity" to those behaviors (Johnston & Patenaude, 1994).

It was hypothesized that the following would predict parental tolerance for misbehavior: (1) demographic variables such as child age, maternal age, and SES, and (2) maternal stress as measured by the number of children in the family, child chronic illness, and scores on a measure of life stress. SES was hypothesized to predict tolerance because previous research reported a link between harsh child rearing practices and SES (Dodge et al., 1994). A link between child age and tolerance was hypothesized because parents perceive older children as having more control over disruptive behavior relative to younger children and they report more distress in response to older children's disruptive behavior (Dix et al., 1986). It was hypothesized that the number of children in the family and tolerance would be linked because stress, as measured by daily parenting hassles, has been found to increase significantly when there is more than one child in the family (O'Brien, 1996).

It was hypothesized that social desirability would not account for the greatest amount of variance in parents' report on the study measures. Additional psychometric hypotheses were that the measures of parental tolerance for misbehavior developed for this study would demonstrate evidence for adequate internal consistency and test-retest reliability.

METHODS

Participants

During a three month period, participants were recruited at three local pediatrician's offices, a daycare, a health-fair, one McDonald's Restaurant, and the outpatient clinics of Children's Medical Services. Among the 575 women approached for possible study, a total of 353 women met the inclusion criteria in that they were Caucasian or African American females, the primary caretaker of a child between the ages of 3 and 10 years, and from the Gainesville, Florida area. Of the 353 women who met the inclusion criteria, 302 agreed to participate and 51 were not included as participants for the following reasons: 44 (86%) were not interested in participating, 6 (12%) agreed to participate but left the recruiting site before enrolling in the study, and 1 (2%) woman was accompanied by her social worker who did not want her to participate in the study. Of the 575 women approached, 221 were ineligible for study for the following reasons: 175 (79%) did not have children in the age range, 23 (10%) were noncustodial grandmothers, 14 (6%) were Hispanic or Asian, 8 (4%) had already participated, and 1 (1%) was from out of state. The 302 participants who met the inclusion criteria and agreed to participate in the study included 240 (93%) mothers, 17 (5%) custodial grandmothers, 1 (.4%) stepmother, 1 (.4%) aunt, 1 (.4%) sister, and 1 (.4%) female classified as "other" (these data were not available for 42 participants). Of the 302 recruited participants, 234 completed all six study measures, 28 completed at least one measure, and 40 did not complete any

measures as they did not finish the packet before they left the site and they did not return the questionnaires by mail. The analyses for this study include only the 262 participants who completed one or more measures. The 40 participants with no data available were not included in the analyses.

There was no significant difference in the percentage of African American and Caucasian women who met the inclusion criteria but refused to participate in the study (12% of the Caucasian group refused, 14% of the African American group refused), chi-square (1, $n = 352$) = .209, $p = .648$. For the total sample of eligible mothers, there was no maternal age effect for refusing the study, $F(1, 300) = 3.704$, $p = .055$. There was no significant difference between the African American and Caucasian participants for the percentage of files with no data (11% had no data in the Caucasian group, 17% had no data in the African American group), chi-square (1, $n = 302$) = 1.87, $p = .172$.

The overall mean age of the 262 participants who completed one or more measures was 33.8 ($SD = 8.6$; range = 19 to 70 years). Background variables were assessed with the demographics questionnaire and data for the sample are reported in Table 1. As noted previously, African American and Caucasian females were under study. The racial composition of the sample was predominately Caucasian (63%) and there was no difference between the African American and Caucasian women for mean age. One woman who identified herself as mixed American Indian-Caucasian was coded as Caucasian. One woman who identified herself as mixed African American - Caucasian was coded as African American. A significant difference was found for education; Caucasian mothers had more education relative to the African American mothers, $t(260) = -2.840$, $p = .005$, and Caucasian fathers had more education relative to the African

American fathers, $t(192) = -2.458$, $p = .015$. Caucasian participants reported significantly different and higher incomes relative to the African American participants, $t(251) = -7.178$, $p = .000$, and Caucasian families had significantly different and higher SES indexes relative to the African American families, $t(260) = -5.200$, $p = .000$.

Sixty percent of all women studied were married. Differences between the African American participants and Caucasian participants for the percentage of married versus single women achieved significance (74% were married in the Caucasian group, 36% were married in the African American group), chi-square (1, $n = 255$) = 35.22, $p = .000$.

Ninety-two percent of all women studied were mothers. Differences between the African American participants and Caucasian participants for the percentage of mothers versus non-mothers who participated in the study was significant (95% were mothers in the Caucasian group, 88% were mothers in the African American group), chi-square (1, $n = 261$) = 4.072, $p = .044$.

Measures

Demographics

This questionnaire provided information pertaining to the maternal age, level of education, race, income, marital status, and the ages of the participant's children. Participants identified whether any of their children had behavioral, attentional, developmental, medical, or learning problems. It also asked for the identified child's gender, age, educational level, and attendance in special classes or treatment for behavior problems. Participants were asked to indicate whether the identified child had been teacher-referred for treatment of disruptive behavior and whether the participant believed this child needs treatment for his or her behavior.

Disruptive Behavior

Eyberg Child Behavior Inventory (ECBI). The ECBI (Eyberg & Pincus, in press) is a 36-item parent report measure of disruptive child behaviors that contains two scales: The Problem Scale, which assesses the number of behavior problems that the parent finds difficult; and the Intensity Scale, which assesses the frequency of each behavior problem from 1 (never) to 7 (always). The frequency of behavior problems and number of behavior problems the parent finds difficult are summed to provide scores for the Intensity and Problem Scales. These scales have been newly restandardized with 798 children between the ages of 2 and 16 (Colvin, Eyberg, & Adams, 1998). Additional studies have demonstrated the construct validity (Boggs, Eyberg, & Reynolds, 1990; Webster-Stratton & Eyberg, 1982) and sensitivity to change during treatment (Eisenstadt, Eyberg, McNeil, Newcomb, & Funderburk, 1993; Webster-Stratton, 1984) of the ECBI.

There are several advantages to using the ECBI in this study. Unlike other measures of disruptive behavior, the ECBI samples a number of behaviors that are appropriate for a wide range of ages (2 to 16 years of age). The ECBI is behaviorally based, uses realistic stimuli, and can be administered quickly. By administering the ECBI and two face valid tolerance measures, the relation between the child's behavior problems as reported by parents on the ECBI and the parents' tolerance for misbehaviors as measured by the tolerance measures can be addressed. Unlike most parent report measures of child behavior, the ECBI includes an assessment of one aspect of the parental distress - whether or not the parent is bothered by the presence of a behavior in their child - through the problem score. Single parent mothers of nonproblem children have reported higher scores on the Problem Scale relative to mothers from intact families despite

similar scores on the Intensity Scale (Boggs, Eyberg, & Reynolds, 1990; Eyberg, 1992). Although it is likely that the single mothers' elevated scores on the Problem Scale simply reflects the fact that disruptive child behavior is perceived as more problematic because there is only one parent to deal with the behavior, it has been hypothesized that the ECBI Problem Scale is a measure of maternal distress towards the child's behavior.

Social Desirability

Marlowe-Crowne Social Desirability Scale. The Marlowe-Crowne Social Desirability Scale (M-C SDS; Crowne & Marlowe, 1960) is a popularly used measure of social desirability (i.e., an individual's propensity to provide socially acceptable responses). It consists of 33 items which are presented in a true-false format and when scored with a key, the M-C SDS yields a Total Social Desirability Score. This scale has well established psychometric properties and is one of the best known measures of social desirability. Reliability analyses with 39 participants have shown the M-C SDS to have adequate internal consistency (.88) and to be highly stable over a one month interval (.89) (Marlowe & Crowne, 1960).

Stress

The Life Experiences Survey (LES). The LES is a 57-item self-report measure in which respondents indicate the events they have experienced within the past 12 months (Sarason, Johnson, & Siegel, 1978). The questionnaire asks respondents to indicate which events they experienced during the past year (0-6 months or 7-12 months), whether they viewed the event as being positive or negative, and the extent of the event's perceived impact at the time of the occurrence. Respondents give a valence rating on a 7-point scale ranging from -3 (extremely negative) to +3 (extremely positive) for their

perception of the impact of each life event. The LES has one section that presents events that are common to individuals in a wide variety of situations. Section 1 (items 1 - 50) also includes three blank spaces in which the respondent may indicate any additional events they have experienced that are not included in the list of events. Section 2 (items 51 - 60) of the LES presents 10 events that are designed exclusively for use with students. Analyses for this study included participants' responses for Section 1 and Section 2. All analyses involved change scores based on the entire preceding 12-month time period.

The LES yields a total change score, a negative change score, and a positive change score. Test-retest analyses involving 58 participants revealed that the 6 week stability of the negative change score was .88, the stability of the positive change score was .53, and the total change score stability was .64 (Sarason et al., 1978). The measure also has well established psychometric properties including validity as evidenced by significant relations with other measures of personal adjustment that were hypothesized to be related to LES scores such as measures of depression and parenting stress (Sarason et al., 1978). Responses to the LES have been found to be relatively free from the influence of social desirability.

For this study, the total negative change score was used as it is the impact of negative stressful events on parenting that is of concern. The authors of the LES have suggested that negative change scores should be used if one's purpose is to provide an index of life stress as the positive change scores were not significantly correlated to stress-related dependent measures (Saranson et al., 1978). Furthermore the positive life change scores are less psychometrically robust as they have lower internal consistency

and test-retest reliability scores relative to the negative life change scores (Saranson et al., 1978).

Frequency of negative life events and frequency of positive life events can also be calculated from the LES but previous study indicates that use of the participant's negative perceptions of life events (i.e. using negative change scores rather than the frequency of negative life events) allows for better predictive ability (Zuckerman, Oliver, Hollingworth, & Austrin, 1986). For analyses including the LES there were no differences in the relation of the LES to other variables whether the frequency of negative life events or the negative change score was used. Based on the suggestion made by Zuckerman et al. (1986) and Sarason et al. (1978), the negative change score was reported for analyses including the LES.

Socioeconomic Status

SES was calculated using Hollingshead's (1975) index of social status. The educational and occupational scales were used to obtain SES scores for each family based on their education and occupation. These scores ranged from 11 to 66 with a mean score of 37.16 ($SD = 13.56$) for the total sample.

Procedure

Development of Tolerance Measures

Child Rearing Inventory. A measure of parental tolerance for disruptive child behavior, the Child Rearing Inventory (CRI; see Appendix A), was specifically developed for use in this study. Initial items thought to reflect the construct of tolerance were generated and a panel of five psychologists selected 14 items from the pool of items to be included in the measure. This questionnaire provided information regarding the

participants' tolerance for the identified child's behavior as they were asked to complete the measure specifically for the identified child. The format of the measure was based on Harter's Self-Perception Profile for Children (1982) and one benefit of this format is that it reduces the likelihood of receiving socially acceptable responses from participants (Harter, 1982).

The questionnaire consisted of 14 items and parents were asked to indicate for each item which statement was true for them (e.g., "My child often does things I can not stand" or "My child rarely does things I can not stand") and then indicate whether the statement was "Sort of True" or "Really True" for them. The response to each item was recorded using a 4-point Likert-type scale from 1 to 4; yielding a Total Tolerance score ranging from 14 to 56; with higher scores reflecting lower tolerance for misbehavior. Missing items were queried and mothers were asked to provide an answer for the skipped item. If a mother reported that she could not give an answer the item was given a score of 2.5.

Data were collected from 246 mothers using the 14-item CRI. Review of the item-to-total correlations for the 14-item CRI revealed five items with low correlations to the CRI total score (see Table 2). Three of these items were unrelated to each other and a preliminary principal components analysis yielded four factors with eigenvalues greater than one (see Table 3). Three items with weights greater than .31 on more than one factor were removed from the measure and a principal components analysis of the new 11-item CRI ($n = 246$) yielded two factors with eigenvalues greater than 1. Together, the two unrotated factors accounted for 43% of the variance. Factor 1 consisted of eight items that appeared to represent how bothersome the mother finds child misbehavior such as noncompliance, back-talk, and yelling. This factor, labeled bothered by child, accounted

for 27% of the variance. Factor 2 consisted of the remaining three items, which appeared to represent the mother's perception for the severity of her discipline style. This factor, labeled discipline, accounted for an additional 16% of the variance. The items and their factor loadings are presented in Table 4. The mean score for Factor 1 was 24.14 ($SD = 4.24$), and the mean score for Factor 2 was 6.64 ($SD = 1.94$).

Internal consistency of the 11-item CRI was evaluated for a sample of 246 participants while the test-retest reliability of the CRI was evaluated for a sample of 53 participants.

Annoying Behavior Inventory (ABI). A measure of parental tolerance for disruptive child behavior, the ABI (see Appendix B), was specifically developed for use in this study. Items thought to represent behaviors that parents find annoying were generated and a panel of five psychologists selected 36 items from the original pool of items to be included in the measure. This questionnaire provided a measure of the participants' general tolerance for child disruptive behavior as they were asked to respond to the items with all children in mind. This questionnaire also provided a measure of perceived appropriateness of punishment for child misbehavior.

The ABI is a 36-item list of disruptive child behavior. Participants were asked to indicate "how annoying the behavior would be for you *if* your child acted this way." The response to each item was recorded using a 4-point Likert-type scale from 0 to 3; yielding a Total Annoyance score ranging from 0 to 108; with higher scores reflecting greater annoyance with the items. Participants were then asked to indicate which behaviors they believed should be punished or reprimanded. The responses for this second part of the measure yielded a Total Punish score ranging from 0 to 36; with higher scores reflecting a

greater propensity to use punishment. Missing items were queried and mothers were asked to provide an answer for the skipped item. Internal consistency for the ABI was evaluated for 242 participants. Test-retest reliability for the ABI was evaluated for a sample of 55 participants.

Recruitment of Participants

The procedures involved and the amount of time needed to complete study (20 to 40 minutes) were explained to participants verbally and in written form (protocol approved by the University of Florida Health Science Center Institutional Review Board). The date, time of day, location, research assistant's initials, demographic data (approximate age, race), and reason for refusal (when applicable) were recorded for all of the women approached to provide data regarding the characteristics of women who refused study participation. At that time, volunteers who met the inclusion criteria were asked to complete six questionnaires: the demographics form, the ECBI, the M-C SDS, the CRI, the ABI, and the LES. If participants had more than one child between the ages of 3 and 10 they were asked to choose one child and complete the questionnaire with the identified child in mind.

Due to the length of the procedures, 97 participants were unable to finish the study during the initial contact. These participants were asked to send the remaining questionnaires to the primary investigator via mail. The remaining measures were explained to the participant and she was given an envelope with postage and the primary investigator's address. Thirty-two participants returned the completed questionnaires via mail. Participants were asked for permission to call them at home if there were any follow-up questions about their responses to the measures. If permission for a follow-up phone call

was given, the participant's phone number was recorded on the demographic questionnaire. When the phone number was available for the 65 participants with missing data, they were contacted by phone to solicit questionnaire responses. Second packets were also sent to those participants who provided their mailing addresses for the test-retest portion of the study. Participant questionnaires that were not completed correctly were followed up with a phone call (when a phone number was available) to solicit correct data.

During the initial contact, participants were asked if they would be willing to complete two of the measures, the CRI and the ABI, two weeks later. A total of eighty-nine participants volunteered for the second phase of the study and were mailed a test-retest packet two weeks after their participation in the first phase of the study. No differences were found between those who participated in the second phase of the study and the participants who only participated in the first phase of the study on the CRI score, $F(244) = .051$, $p = .882$, the LES total negative change score, $F(221) = 1.34$, $p = .248$, the ABI Annoyance score, $F(240) = .008$, $p = .930$, the ABI Punish score, $F(235) = .092$, $p = .761$, the ECBI Intensity score, $F(238) = 1.76$, $p = .186$, the ECBI Problem score, $t(231) = 2.966$, $p = .086$, mothers' age, $F(261) = .266$, $p = .607$, or SES, $F(260) = 1.899$, $p = .169$, suggesting that the participants who volunteered for the test-retest portion of the study did not differ from the rest of the sample. There was a significant difference between the two groups on the M-C SDS score, $F(231) = 4.00$, $p = .047$, with the participants who participated in the test-retest portion of the study having fewer socially desirable responses on the M-C SDS relative to the rest of the sample.

The test-retest packet included a cover letter, the ABI, and the CRI. Participants were asked in the cover letter to complete the questionnaires as soon as possible and to return

them to the investigator (in an enclosed envelope with pre-paid postage). Fifty-seven participants returned completed test-retest questionnaires. Thirty-two participants who were sent test-retest packets did not send their completed questionnaires despite being called at home and sent a second test-retest packet. Fifty-one participants returned their packets shortly after they participated in Phase 1 of the study ($M = 19.09$ days; $SD = 4.37$; range: 14 to 33 days). Six participants were late returning their packets ($M = 96.50$ days, $SD = 24.80$; range: 71 to 128 days). Analyses of the data provided by the six "late" participants and the 51 "early" participants were compared and no significant group differences were found on the CRI, $t(55) = .512$, $p = .611$, the ABI Annoyance Scale, $t(55) = -.124$, $p = .902$, or the ABI Punish Scale, $t(54) = .817$, $p = .418$. As the test scores were equivalent, data from the six participants with late packets were included in the test-retest data analyses.

As remuneration for participation, participants were offered a coupon for a free McDonald's Extra Value Meal or free parenting handouts. No differences were found between the participants who received McDonald's coupons and the participants who received parenting handouts on the total CRI score, $F(194) = .016$, $p = .899$, the M-C SDS score, $F(195) = .252$, $p = .616$, the negative LES change score, $F(188) = .744$, $p = .380$, the ABI Annoyance score, $F(196) = .135$, $p = .714$, the ABI Punish score, $F(194) = .007$, $p = .932$, the ECBI Intensity Score, $F(196) = 2.529$, $p = .113$, or the ECBI Problem Score, $F(192) = .533$, $p = .466$, suggesting that the method of remuneration had no effect on the participants' responses to the study measures.

RESULTS

Demographics

Child variables were assessed with the demographics questionnaire and data for the sample are reported in Table 5. The mean age of the identified child was 5.76 ($SD = 2.07$) and the mean grade level was 1.08 ($SD = 1.40$). The identified children included 47% ($n = 122$) females and 54% ($n = 140$) males. There was no significant difference between the males ($M = 5.55$, $SD = 1.97$) and females ($M = 6.00$, $SD = 2.16$) for mean age but there was a significant difference between the mean grade level of males ($M = .90$, $SD = 1.25$) and females ($M = 1.29$, $SD = 1.52$), $t(239) = 2.208$, $p = .028$. There were no significant differences between the Caucasian and African American groups on the distribution of males and females, age, or grade variables.

Nine percent ($n = 22$) of the children were enrolled in a special class for learning or behavior problems, 12% ($n = 31$) had been treated for behavior problems, 12% ($n = 31$) answered yes to the question "Does your child's teacher think that he or she needs treatment for his or her behavior?" and 14% ($n = 36$) of the participants reported that their child should be treated for behavior problems. Significant differences were found for the percentage of males and females who had been treated for behavior problems (19% of all males, 8% of all females), chi-square (1, $n = 257$) = 6.017, $p = .014$, teacher referred for behavior problems (18% of all males, 6% of all females), chi-square (1, $n = 256$) = 8.360, $p = .004$, and treated for behavior problems (18% of all males, 5% of all females), chi-

square (1, $n = 259$) = 10.307, $p = .001$. The percentage of males versus females enrolled in special classes was not significantly different. There was no difference between the Caucasian and African American groups on these variables.

Participants reported that 21% ($n = 55$) of the children had a medical illness. Thirty six children (66%) had asthma and/or allergies, 3 children (6%) had seizures, 6 children (11%) had an unspecified illness, and 1 child (2%) was reported for each of the following illnesses: anemia, leukemia, cystic fibrosis, megacolon, spina bifida, bladder extrophy, cancer, encopresis, osteogenesis imperfecta, and cataracts. The percentage of children with medical illness in the Caucasian group (17%) and African American group (28%) was significantly different, chi-square (1, $n = 259$) = 4.329, $p = .037$. The percentage of males and females with medical illnesses was not significantly different.

Participants reported that 14% ($n = 36$) of the children had behavior problems. Of these children with behavior problems, participants reported that 78% ($n = 28$) had a diagnosis of ADHD or displayed symptoms consistent with ADHD, 8% ($n = 3$) had temper tantrums, 3% ($n = 1$) displayed "mean" behavior, and 11% ($n = 4$) had unspecified behavior problems. There was no difference between the Caucasian and African American groups on this variable. There were significantly more males than females with behavior problems (19% of all males, 8% of all females), chi-square (1, $n = 260$) = 5.911, $p = .015$.

Participants reported that 5% of the children ($n = 14$) had learning problems which included problems with reading (22%, $n = 3$), math (14%, $n = 2$), being a "slow learner" (14%, $n = 2$), having speech problems (14%, $n = 2$), and unspecified learning problems (36%, $n = 5$). There was an equal percentage of children with learning problems in the

Caucasian and African American groups. There was no difference in the percentage of males and females with learning problems.

Participants reported that 7% of the children ($n = 17$) had a developmental disability or developmental delay. Among the developmental delays/disabilities reported were Down Syndrome (17%, $n = 3$), delayed/born premature (23%, $n = 4$), "mentally challenged" or educably mentally handicapped (12%, $n = 2$), hearing impaired (12%, $n = 2$), motor dysfunction (6%, $n = 1$), speech and language impairment (12%, $n = 2$), cerebral palsy (12%, $n = 2$), and unspecified developmental delay/disability (6%, $n = 1$). There were equal percentages of children with developmental delay/disability in the Caucasian and African American groups. There was no difference in the percentage of males and females with developmental delay/disability.

Participants reported that 1% of the children ($n = 2$) had a problem classified as "other." These problems included Tourette's Syndrome ($n = 1$) and an unspecified problem ($n = 1$).

Information regarding the participants' other children was assessed with the demographics questionnaire and data for the sample are reported in Table 6. These items were added to the demographics questionnaire after the study began and, as a result, data are not available for 78 participants. The following analyses were calculated with data from the 138 participants who indicated that they had one or more children in addition to the identified child. Gender analyses were not conducted as this information was not collected for the siblings.

Participants reported that 15% ($n = 21$) of their other children had a medical illness. Sixteen children (77%) had asthma and/or allergies, 2 children (11%) had an unspecified

illness, 1 child (6%) had hyperthyroidism, and 1 child (6%) was reported as having osteogenesis imperfecta. The percentage of siblings with medical illness in the Caucasian group and African American group was significantly equivalent.

Participants reported that 12% ($n = 17$) of the siblings had behavior problems. Of these children with behavior problems, participants reported that 53% ($n = 9$) had a diagnosis of ADHD or displayed symptoms consistent with ADHD, 13% ($n = 2$) had anger management problems, 19% ($n = 3$) were reported as having unspecified behavior problems, 7% ($n = 1$) had ODD, 7% ($n = 1$) were described as "always in trouble," and 7% ($n = 1$) displayed "truancy." There was no difference between the Caucasian and African American groups on these variables.

Participants reported that 7% of their other children ($n = 9$) had learning problems which included being a "slow learner" (44%, $n = 4$), "problems with reading" (22%, $n = 2$), dyslexia (22%, $n = 2$), and an unspecified learning disability (11%, $n = 1$). There was an equal percentage of children with learning problems in the Caucasian and African American groups.

Participants reported that 7% of the siblings ($n = 9$) had a developmental disability or delay. Among the developmental delays/disabilities reported were speech and language impairment (33%, $n = 3$), an emotional handicap (22%, $n = 2$), unspecified developmental delay/disability (33%, $n = 3$), and "shaken baby syndrome" (11%, $n = 1$). There were equivalent percentages of children with developmental delay/disability in the Caucasian and African American groups.

Participants reported that 2% of the siblings ($n = 3$) had a problem classified as "other." These problems included Tourette's Syndrome ($n = 1$), schizophrenia ($n = 1$), and a history of physical and sexual abuse ($n = 1$).

There were no differences between the African American sample and the Caucasian sample for number of children in the family or the age of the identified child.

Tolerance

Participants' tolerance for child misbehavior was measured by the 11-item CRI. Internal consistency estimates were good (coefficient alpha for total sample = .72, coefficient alpha for Caucasian group = .73, coefficient alpha for African American group = .70; see Table 7). The mean total scores, standard deviations, and coefficient alphas for the CRI are listed in Table 7.

Item analysis revealed that the CRI has adequate content validity. Table 8 provides the CRI item means, item standard deviations, and item-total correlation coefficients.

Overall, participants were tolerant of child misbehavior, with a mean CRI total score of 30.78 out of a possible 44 points; higher scores reflecting lower tolerance for misbehavior. No differences were found between the CRI scores for the African American group and Caucasian group, controlling for SES, $F(1, 243) = .780, p = .46$. There was no race effect for CRI scores when SES was not controlled, $F(1, 244) = .594, p = .44$.

Participants' tolerance for child misbehavior was also measured by the 36 item ABI. Internal consistency estimates were excellent for the ABI Annoyance Scale (coefficient alpha for total sample = .93, coefficient alpha for Caucasian group = .94, coefficient alpha for African American group = .92; see Table 7) and the ABI Punish Scale (coefficient

alpha for total sample = .93, coefficient alpha for Caucasian group = .92, coefficient alpha for African American group = .94; see Table 7). The ABI Annoyance Scale and Punish Scale total scores, standard deviations, and coefficient alphas are listed in Table 7.

Item analysis revealed that the ABI Annoyance and Punish Scales have adequate content validity. Table 9 provides the ABI Annoyance Scale item means, item standard deviations, and item-total correlation coefficients. Table 10 provides the item-total correlation coefficients for the ABI Punish Scale.

There were no group differences between the African American group and the Caucasian group for total ABI Annoyance score, $F(1, 239) = 1.91, p = .168$, or total ABI Punish score, $F(1, 234) = .145, p = .704$, controlling for SES. There were no race effects when SES was not controlled on the total ABI Annoyance score, $F(1, 240) = 1.81, p = .180$, or the total ABI Punish score, $F(1, 235) = .388, p = .534$.

Two week test-retest data were collected for a sample of 57 mothers on the CRI. The test-retest reliability coefficient was good for the CRI at time 1 and time 2 (coefficient for total sample = .69; see Table 11) as well as for the internal consistency of CRI at time 2 (coefficient alpha for total sample = .79). Two week test-retest data were also collected for a sample of 55 mothers on the ABI. The reliability was adequate between time 1 and time 2 for the ABI Annoyance Scale (coefficient for total sample = .68; see Table 11) and the ABI Punish Scale (coefficient for total sample = .62; see Table 11). The internal consistency was excellent for both the ABI Annoyance Scale (coefficient alpha for total sample = .93) and the ABI Punish Scale (coefficient alpha for total sample = .93) at time 2. Participants who returned the test-retest packets had a mean age of 34.15 ($SD = 7.46$), a mean Hollingshead SES rating of 39.24 ($SD = 13.48$), and

included 15 African American participants (26.3%) and 42 Caucasian participants (73.7%). The mean age of the identified child for the test-retest sample was 5.79 ($SD = 1.83$). Table 11 provides the means, standard deviations, and intercorrelations for the test-retest data for the CRI and the ABI.

The concurrent validity of the CRI was investigated using correlational analyses to explore the relation between maternal ratings of perceived stress, perceived behavior problems, annoyance for child misbehavior in general, perceived appropriateness of punishment for child misbehavior, and demographic variables. As expected, all three tolerance scores (CRI Total Score, ABI Annoyance Score, and the ABI Punish Score) were significantly correlated with one another (see Table 12). High CRI total scores (indicating lower tolerance for misbehavior) predicted higher frequency of child behavior problems as rated by the ECBI Intensity Scale and a greater number of behaviors perceived as problematic as rated by the ECBI Problem Scale. No significant relation between the CRI and SES or the M-C SDS emerged, confirming their independence from one another. Table 12 shows the pattern of correlations among the study variables for the total sample as well as the means and standard deviations for all measures.

The relationship between the two CRI factor scores and the study variables were investigated using correlational analyses (see Table 13). The pattern of correlations found between the CRI Bothered by Child Scale (factor 1) and the other study variables was similar to that found between the CRI total score and the other study variables. There were some differences between the CRI total score and CRI Discipline Scale in their relation to the study variables. Correlational analyses revealed that the CRI Discipline Scale had a negative but significant relation to the ECBI Intensity Scale and

the number of children in the family. This suggests that less perceived severity of punishment is related to larger families and greater behavior problems as rated by the ECBI.

Behavior Problems

The participants' report of behavior problems displayed by the identified child was assessed with the ECBI. Internal consistency estimates were excellent for both the ECBI Intensity Scale (coefficient alpha for the total sample = .93) and the ECBI Problem Scale (coefficient alpha for the total sample = .91; see Table 14).

The mean ECBI Intensity ($M = 99.25$, $SD = 29.35$) and mean ECBI Problem ($M = 8.75$, $SD = 7.51$) scores were not significantly different between the Caucasian group and the African American group ($M = 92.06$, $SD = 30.32$; $M = 7.20$, $SD = 6.90$). However, there were no race effects on the ECBI Intensity score, $F(1, 237) = 3.70$, $p = .056$, or the ECBI Problem score, $F(1, 230) = 3.24$, $p = .073$, controlling for SES. Additionally, there were no race effects on the ECBI Intensity score, $F(1, 238) = 3.26$, $p = .072$, or the ECBI Problem score, $F(1, 231) = 2.44$, $p = .119$, when SES was not controlled.

Social desirability, SES, and the ECBI Intensity and Problem scores are linked as there are significant correlations between SES and social desirability ($r = -.23$, $p = .00$), with lower SES status being related to greater social desirability, and between social desirability and the ECBI Intensity ($r = -.35$, $p = .00$) and ECBI Problem ($r = -.17$, $p = .005$) scales, with parent report of less frequent behavior problems and fewer problematic behaviors being related to greater social desirability (see Table 12). Based on these correlations, the ECBI scores for this sample were influenced by the parent's desire to present themselves in a positive light, their education, occupational status, and

perceptions of child behavior problems. Multiple regression analyses were conducted to explore these relations further.

Predicting ECBI Intensity Scores

Hierarchical linear regression was used to statistically predict frequency of child behavior problems. Table 15 provides the prediction models and includes the variables that were determined significant. Child age and gender were entered as Step 1: neither were found to be significant and both were dropped. Mother's age and marital status were entered as Step 2: neither were found to be significant and both were dropped. The LES total negative change score, number of children in the family, SES, and chronic illness were entered as Step 3: none were found to be significant and all were dropped. Race (added as Step 4) was not found to be significant and was dropped. Greater social desirability as measured by the M-C SDS (added as Step 5) predicted fewer behavior problems, $t(227) = -1.93$, $p = .000$, and was retained for the next model. Tolerance for misbehavior as measured by the CRI (added in Step 6) was not found to be significant and was dropped. Annoyance for misbehavior and perceived appropriateness of punishment as measured by the ABI Annoyance and Punish scales (added in step 7) were nonsignificant.

The regression analyses suggest that a parent's tolerance for misbehavior is less important in predicting frequency of behavior problems than the parent's tendency to use a socially desirable response set. Race approached significance as a predictor for the ECBI Intensity scores with Caucasian mothers reporting a greater number of behavior problems in this sample.

Predicting ECBI Problem Scores

Parental report of problematic behavior was also examined (see Table 16). Child age and gender were entered as Step 1: these variables were not found to be significant and both were dropped. Mother's age and marital status were entered as Step 2: these variables were not found to be significant and both were dropped. The LES total negative change score, number of children in the family, SES, and chronic illness were entered as Step 3: none were found to be significant and all were dropped. Race (added as Step 4) was not found to be significant and was dropped. Greater social desirability as measured by the M-C SDS (added as Step 5) predicted lower ECBI Problem scores, $t(221) = -2.57$, $p = .011$, and was retained for the next model. Greater tolerance for misbehavior as measured by the CRI (added in Step 6), $t(220) = 3.47$, $p = .001$, and greater social desirability, $t(220) = -2.48$, $p = .014$, predicted lower ECBI Problem scores. The M-C SDS total score, the CRI, the ABI Annoyance score, and the ABI Punish score were entered as Step 7. The M-C SDS total score, $t(218) = -2.49$, $p = .014$, and the CRI, $t(218) = 3.27$, $p = .001$, predicted the ECBI Problem score while the ABI Annoyance and Punish scores were nonsignificant. Thus, women with greater tolerance for misbehavior and a greater tendency to present themselves in a positive light rated their children as displaying fewer problematic behaviors.

Comparison to Norms

ECBI scores for the Caucasian and African American groups for this study were compared to norms for 2 to 16 year olds scores (Colvin et al., 1998) on the ECBI which are 96.6 ($SD = 35.2$) for the Intensity Scale and 7.1 ($SD = 7.7$) for the Problem Scale. Scores for the Caucasian group were significantly different and higher than the normative

sample on the Problem score using the Welch's t statistic, $t(202) = 2.45$, $p < .05$, but the Intensity Scale scores were equivalent to the normative sample. The ECBI scores for the African American group were not significantly different from the normative group for the Intensity or Problem Scale.

Clinical Significance

Percentages of the children classified as having clinically significant conduct problems based on participants' report on the ECBI Intensity and Problem scales were calculated. The clinical cutoff scores reported by Colvin et al. (1998) were used to classify children in the conduct problem and non-conduct problem groups. Based on the Intensity scores, 13% ($n = 30$) children were placed in the conduct problem group and the remaining 87% ($n = 210$) were placed in the non-conduct problem group. Based on the Problem scores, 19% ($n = 44$) were placed in the conduct problem group and the remaining 81% ($n = 189$) were classified as non-conduct problems by the participants. There was an equal percentage of children with scores in the clinical range for both the ECBI Intensity and Problem Scales in the Caucasian and African American groups.

Life Stress

The participants' report of life stress was assessed with the LES total negative change score. The internal consistency estimate was good for the total negative life events change score (coefficient alpha for the total sample = .78) and items corresponding to the time since the event occurred (coefficient alpha for the total sample = .75; see Table 17). This good reliability is consistent with the adequate test-retest reliability reported by Sarason et al. (1978).

LES negative life events change scores for the Caucasian and African American groups in this study were compared to norms reported by Sarason et al. (1978) on the LES which was 7.04 ($SD = 7.90$) for females responding to Parts 1 and 2 combined. Scores for the Caucasian group, $t(312) = -2.29$, $p < .05$, and the African American group, $t(181) = -2.10$, $p < .05$, were significantly different and lower than the normative sample using the Welch's t statistic.

No difference was found for the total negative life events change scores as measured by the LES for the Caucasian group ($M = 5.05$, $SD = 7.71$) and the African American group ($M = 5.12$, $SD = 6.12$) when SES was controlled, $F(1, 220) = .022$, $p = .883$, or when SES was not controlled, $F(1, 221) = .005$, $p = .945$. However, the LES, M-C SDS and SES are linked as there is a significant correlation between the M-C SDS and SES ($r = -.23$, $p = .000$), with low SES status being related to greater social desirability, and a significant correlation between the M-C SDS and LES ($r = .15$, $p = .05$) with fewer negative events being related to greater social desirability (see Table 12). This suggests that the LES negative change scores were influenced by education, occupational status, social desirability, and perceived life stress.

Social Desirability

Participants' social desirability was measured by their scores on the M-C SDS. The internal consistency estimate for this measure was good (coefficient alpha for the total sample = .80; see Table 17).

M-C SDS scores for the Caucasian and African American groups for this study were compared to norms reported by Crowne and Marlowe (1960) on the M-C SDS which was 13.72 ($SD = 5.78$). Scores for the Caucasian group, $t(237) = 9.34$, $p < .05$, and the

African American group, $t(189) = 11.19$, $p < .05$, were significantly different and higher than the normative sample using the Welch's t statistic.

The African American group ($M = 22.11$, $SD = 4.93$) had higher scores on the M-C SDS than the Caucasian group ($M = 20.17$, $SD = 5.54$; see Table 17). Analysis using ANCOVA revealed a nonsignificant race \times SES effect for M-C SDS scores, $F(3, 229) = 8.988$, $p = .142$, a nonsignificant race effect for M-C SDS scores, $F(3, 229) = .603$, $p = .438$, and a significant SES effect for M-C SDS scores, $F(3, 229) = 3.869$, $p = .050$; meaning that participants with higher SES responded to the M-C SDS with a less socially desirable response set. There was a significant race effect for the M-C SDS score when SES was not controlled, $F(1, 231) = 7.08$, $p = .008$.

Predicting Social Desirability

Hierarchical multiple regression was used to determine M-C SDS scores (see Table 18). Demographic variables such as child age and gender were entered as Step 1: neither were found to be significant and both were dropped. Mother age and marital status were entered as Step 2: neither were found to be significant and both were dropped. Race (added in Step 3), $t(231) = -2.66$, $p = .008$, predicted social desirability and to avoid multicollinearity problems, SES was added separately as Step 4. Lower SES, $t(231) = -3.59$, $p = .000$, predicted greater social desirability. The regression analyses suggest that the Caucasian mothers and mothers with greater socio-economic status reported less social desirability in this sample. Given the importance of social desirability for the prediction of the ECBI Intensity and Problem scores, it is possible that persons with high SES respond to the ECBI differently than mothers from low SES backgrounds.

Predicting Tolerance

CRI Score. Hierarchical linear regression was used to predict tolerance (see Table 19). Child age and gender were entered as Step 1: child age, $t(243) = 3.15$, $p = .002$, predicted tolerance as measured by the CRI while gender was nonsignificant. Child age, mother's age, and marital status were added to Step 2. Greater child age, $t(237) = 3.08$, $p = .002$, significantly predicted less tolerance for misbehavior while the other variables were nonsignificant. Child age was retained and the LES total negative change score, number of children, SES, and chronic illness were entered as Step 3. Child age remained significant, $t(147) = 2.22$, $p = .028$, and the other variables were nonsignificant. Child age was retained and the M-C SDS total score was included in Step 4. Child age, $t(225) = 3.11$, $p = .002$, was significant and the M-C SDS was not significant. Child age was retained and the ABI Annoyance and Punish scores were added to Step 6. Greater child age, $t(226) = 2.34$, $p = .020$, and greater annoyance with child behavior problems, $t(226) = 5.89$, $p = .000$, significantly predicted less tolerance as measured by the CRI while greater perceived appropriateness of punishment approached significance, $t(226) = 1.83$, $p = .068$. Thus, mothers who reported greater annoyance with child misbehavior, mothers of older (school aged) children, and mothers who reported that they would take some action in response to misbehavior also reported less tolerance for misbehavior on the CRI.

ABI Annoyance Score. Hierarchical linear regression was used to predict annoyance with misbehavior (see Table 20). Marital status and gender were entered as Step 1: neither were found to be significant and both were dropped. Race (added in Step 2) was not significant and was dropped from subsequent analyses. The LES total negative change score, number of children, SES, and chronic illness were entered as Step

3: none were found to be significant and all were dropped. M-C SDS (added as Step 4) was not significant and was dropped. Greater child age, $t(240) = 2.03$, $p = .043$, (added as Step 5) predicted greater annoyance with misbehavior. To avoid multicollinearity problems, mother's age was added separately as Step 6. Greater mother's age, $t(239) = 2.25$, $p = .026$, predicted greater annoyance with misbehavior. Similar to the CRI, regression analyses for the ABI Annoyance Scale suggest that increasing child is important for predicting tolerance for misbehavior. Unlike the CRI, maternal age emerged as a significant predictor of maternal annoyance with misbehavior such that greater maternal age predicted greater annoyance.

ABI Punish Score. Hierarchical linear regression was used to predict perceived appropriateness of punishment for child misbehavior (see Table 21). Child age and gender were entered as Step 1: neither were found significant and both were dropped. Mother's age, marital status, and race were added to Step 2. Increasing mother's age, $t(226) = 3.25$, $p = .001$, predicted greater perceived appropriateness of punishment. Mother's age was retained and the LES total negative change score, number of children, SES, and chronic illness were entered as Step 3. Only mother's age, $t(147) = 2.71$, $p = .008$, predicted the ABI Punish score. Mother's age and the M-C SDS total score were included in Step 4. Mother's age, $t(221) = 3.38$, $p = .001$, was found to be significant and the M-C SDS was not found significant. Much like the ABI Annoyance Scale, the regression analyses for the ABI Punish Scale suggests that increasing maternal age predicts a greater tendency to take action in response to misbehavior.

Predicting Referral for Treatment of Behavior Problems

Logistic regression was used to predict child referral status as reported by the participant in the demographic questionnaire (see Table 22). Child age, gender, and race were entered as Step 1. Child age, $R = .31$, odds ratio = 1.67, $p = .000$, and gender, $R = .25$, odds ratio = .14, $p = .000$, were both retained for the next step. Number of children in the family, chronic illness, child age, and gender were added to Step 2. Child age, $R = .28$, odds ratio = 1.59, $p = .000$, and gender, $R = .24$, odds ratio = .14, $p = .002$, were retained for the next step. Mother's age, marital status, and SES were added to Step 3. Child age, $R = .29$, odds ratio = 1.63, $p = .000$, gender, $R = .23$, odds ratio = .15, $p = .000$, and marital status, $R = .11$, odds ratio = .39, $p = .044$, were retained for the next step. The M-C SDS total score and the LES total negative change score were included in Step 4. Child age, $R = .35$, odds ratio = 1.96, $p = .000$, gender, $R = -.24$, odds ratio = .13, $p = .001$, and marital status, $R = -.17$, odds ratio = .27, $p = .015$, were retained for the next step. The ECBI Intensity and Problem scores were included in Step 5. Child age, $R = .31$, odds ratio = 1.98, $p = .000$, gender, $R = .20$, odds ratio = 7.00, $p = .004$, and the ECBI Intensity Score, $R = .22$, odds ratio = 1.04, $p = .002$, were retained for the next step. Step 6 consisted of child age, gender, the ECBI Intensity score, and the CRI total score. Child age, $R = .29$, odds ratio = 1.82, $p = .000$, gender, $R = .23$, odds ratio = 8.95, $p = .001$, and the ECBI Intensity score, $R = .32$, odds ratio = 1.04, $p = .000$, were retained for the next step. The ABI Annoyance and Punish scores were added to Step 7. Child age, $R = .28$, odds ratio = 1.83, $p = .000$, gender, $R = -.21$, odds ratio = .12, $p = .002$, the ECBI Intensity score, $R = .35$, odds ratio = 1.05, $p = .000$, and the ABI Annoyance score, $R = .12$, odds ratio = 1.05, $p = .041$, were significant.

For the child variables in the regression analyses, being a male, older child with a greater frequency of behavior problems predicted referral status. Among the maternal variables, greater maternal annoyance with child misbehavior predicted referral status.

High Tolerance Versus Low Tolerance Mothers

The mean CRI score for the total sample was 30.78 ($SD = 4.95$). High tolerance participants were defined as having a score at least one standard deviation below the mean (tolerant group ≥ 25.83) and the low tolerance participants in this sample were defined as having a score at least one standard deviation above the mean (intolerant group ≤ 35.73). Fifty participants were identified as having high tolerance (20.4% of the total sample) and 36 participants were identified as having low tolerance (14.6% of the total sample).

Partial correlations were conducted for the mean ABI Annoyance Scale item scores and the CRI total scores using the Bonferroni-Holm adjustment. Items that were independent of tolerance included biting, destructiveness, fire-setting, hurting pets, kicking others, namecalling, not eating at mealtime, pushing others, rough play, running away, stealing, and teasing. These nonsignificant correlations suggest that both the low tolerance and high tolerance mothers were annoyed by the behaviors these items represent. Those items significantly correlated with tolerance were those items representing less severe behavior problems (e.g., wanting their own way, dawdling, pouting). These correlations represented a positive relation between mothers' tolerance as measured by the CRI total score and their annoyance ratings for the specific behaviors on the ABI Annoyance Scale (see Table 23).

Table 1
Background Data

	Caucasian (n = 166)		African American (n = 96)	
Mean mothers' age (SD)	34.42	(7.91)	32.71	(9.56)
Mother's education in years (SD)*	13.51	(2.34)	12.78	(1.78)
Father's education in years (SD)*	13.63	(2.30)	12.72	(2.38)
Marital Status*				
Married	119	(73.9)	34	(36.2)
Single ^a	42	(26.1)	60	(63.8)
Participant's relationship to child ^b *				
Mother	156	(95.0)	84	(87.5)
Other ^c	9	(5.5)	12	(12.5)
Income ^d *				
under \$5,000	11	(6.9)	21	(22.3)
\$6,000 - \$10,000	20	(12.6)	24	(25.5)
\$11,000 - \$20,000	23	(14.5)	23	(24.5)
\$21,000 - \$30,000	27	(17.0)	12	(12.8)
\$31,000 - \$40,000	30	(18.9)	11	(11.7)
\$41,000 - \$50,000	20	(12.6)	2	(2.1)
\$51,00 and up	28	(17.6)	1	(1.1)
Hollingshead SES (SD)*	40.18	(13.08)	31.94	(11.41)

Note. Data are n (%) unless otherwise noted.

^aIncludes women who were never married, separated, divorced, or widowed.

^bData unavailable for 1 Caucasian participant.

^cIncludes 17 grandmothers, 1 stepmother, 1 aunt, 1 sister, and 1 "unspecified."

^dData unavailable for 7 Caucasian participants and 2 African American participants.

*Significant difference between groups at $p < .05$.

Table 2

Child Rearing Inventory Item Content, Item Mean, Item Standard Deviation, and Item-Total Correlation

Item Content	Mean	SD	Item-Total ^a
1. Bothered by annoying child behavior	2.44	1.02	.52
2. Bothered by noncompliance	3.30	.89	.45
3. Tolerance for children	1.67	.77	.22
4. Bothered by child who interrupts	2.96	.91	.42
5. Finds child annoying	2.32	.88	.31
6. Annoyed by accidental "bad" behavior	1.60	.80	.14
7. Severity of response to misbehavior	2.17	.87	.26
8. Bothered by child who talks back	3.47	.76	.39
9. Bothered by yelling child	2.64	.94	.34
10. Severity of punishment used	1.96	.67	.19
11. Bothered by phone interruptions	2.91	.95	.43
12. Annoyed by yelling child who bothers others	3.31	.75	.34
13. Bothered by whining	3.10	.90	.41
14. Severity of discipline style	2.52	.97	.23

^aCorrected item-total correlation coefficient (n = 246).

Table 3

Factor Loadings on the 14-item Child Rearing Inventory

Item Content	Factor 1	Factor 2	Factor 3	Factor 4
1. Bothered by annoying child behavior	<u>.65</u>	.10	.23	.00
2. Bothered by noncompliance	<u>.63</u>	-.01	-.21	.02
3. Tolerance for children	<u>.31</u>	.18	<u>.29</u>	<u>-.74</u>
4. Bothered by child who interrupts	<u>.60</u>	-.26	.02	.31
5. Finds child annoying	<u>.44</u>	-.19	<u>.61</u>	-.11
6. Annoyed by accidental "bad" behavior	.22	-.22	<u>.55</u>	<u>.42</u>
7. Severity of response to misbehavior	.29	<u>.72</u>	.09	.19
8. Bothered by child who talks back	<u>.59</u>	-.26	<u>-.41</u>	.14
9. Bothered by yelling child	<u>.50</u>	-.12	-.23	-.13
10. Severity of punishment used	.18	<u>.74</u>	.06	-.04
11. Bothered by phone interruptions	<u>.58</u>	-.04	.20	.00
12. Annoyed by yelling child who bothers others	<u>.50</u>	-.13	-.24	-.07
13. Bothered by whining	<u>.56</u>	.01	-.24	<u>-.32</u>
14. Severity of discipline style	.28	<u>.66</u>	-.19	.28

Table 4

Factor Loadings on the 11-item Child Rearing Inventory

Item Content	Factor 1	Factor 2
1. Bothered by annoying child behavior	<u>.62</u>	.12
2. Bothered by noncompliance	<u>.65</u>	-.13
3. Bothered by child who interrupts	<u>.60</u>	-.25
4. Severity of response to misbehavior	.31	<u>.74</u>
5. Bothered by child who talks back	<u>.63</u>	-.32
6. Bothered by yelling child	<u>.51</u>	-.16
7. Severity of punishment used	.19	<u>.74</u>
8. Bothered by phone interruptions	<u>.56</u>	-.04
9. Annoyed by yelling child who bothers others	<u>.51</u>	-.17
10. Bothered by whining	<u>.57</u>	-.05
11. Severity of discipline style	.34	<u>.65</u>

Table 5
Characteristics of the Identified Child

	Caucasian (n = 166)	African American (n = 96)
Mean child's age (SD)	5.81 (2.01)	5.69 (2.17)
Mean child's grade (SD)	1.12 (1.40) ^a	1.02 (1.39) ^b
Gender (%)		
Male	87 (52.4)	53 (55.2)
Female	79 (47.6)	43 (44.8)
Enrolled in Special Class (Yes)	16 (9.9) ^c	6 (6.3)
Teacher Referred for Treatment (Yes)	18 (11.2) ^d	13 (13.7) ^e
Child Needs Treatment (Yes)	24 (14.8) ^c	12 (12.6) ^e
Has Been Treated for Behavior Problem (Yes)	20 (12.3) ^f	11 (11.5)
Medical Illness (Yes)*	28 (17.2) ^f	27 (28.1)
Behavior Problem (Yes)	24 (14.7) ^f	12 (12.5)
Learning Problem (Yes)	7 (4.3) ^f	8 (8.3)
Developmental Disability (Yes)	8 (5.9) ^f	9 (9.4)
Other (Yes)	5 (3.1) ^f	0 (0.0)

Note. Data are n (%) unless otherwise stated. *Significant difference between groups at $p < .05$.

^an = 153.

^bn = 88.

^cn = 162.

^dn = 161.

^en = 95.

^fn = 163.

Table 6
 Characteristics of Participants' Other Children

	Caucasian	African American
Mean number of other children (SD)	1.32 (1.10) ^a	1.63 (1.70) ^b
Mean number of older children (SD)*	.97 (1.16) ^c	1.47 (1.38) ^d
Mean number of younger children (SD)	.75 (66) ^e	1.00 (1.10) ^f
Medical Illness (Yes)	11 (12.2) ^g	10 (20.8) ^h
Behavior Problem (Yes)	12 (13.3) ^g	5 (10.4) ^h
Learning Problem (Yes)	5 (5.6) ^g	4 (8.3) ^h
Developmental Disability (Yes)	7 (7.8) ^g	2 (4.2) ^h
Other (Yes)	2 (2.2) ^g	1 (2.1) ^h

Note. Data are n (%) unless otherwise stated. *Significant difference between groups at $p = .034$.

^an = 111.

^bn = 70.

^cn = 83.

^dn = 45.

^en = 82.

^fn = 46.

^gn = 90.

^hn = 48.

Table 7

Means and Standard Deviations for the Child Rearing Inventory and
Annoying Behavior Inventory

	Total	Caucasian	African American
	(n = 246)	(n = 154)	(n = 92)
Child Rearing Inventory			
Total Score (SD) ^a	30.78 (4.9)	30.59 (4.7)	31.10 (5.3)
[Coefficient alpha]	[.72]	[.73]	[.70]
Bothered by Child Scale			
Total Score (SD) ^b	24.14 (4.2)	23.81 (4.2)	24.68 (4.2)
[Coefficient alpha]	[.74]	[.78]	[.67]
Discipline Scale			
Total Score (SD) ^c	6.64 (1.9)	6.78 (1.8)	6.41 (2.1)
[Coefficient alpha]	[.65]	[.67]	[.61]
Annoying Behavior Inventory			
Annoyance Scale	(n = 235)	(n = 151)	(n = 84)
Total Score (SD) ^d	71.75 (15.8)	70.76 (15.4)	73.54 (16.4)
[Coefficient alpha]	[.93]	[.94]	[.92]
Punish Scale	(n = 230)	(n = 147)	(n = 83)
Total Score (SD) ^e	16.67 (8.0)	16.83 (7.5)	16.37 (9.0)
[Coefficient alpha]	[.93]	[.92]	[.94]

^aHigher scores = less tolerance (item range = 1 - 4), maximum total score = 44.

^bHigher scores = less tolerance (item range = 1 - 4), maximum total score = 32.

^cHigher scores = less tolerance (item range = 1 - 4), maximum total score = 12.

^dHigher scores = more annoyance (item range = 0 - 3), maximum total score = 108.

^eHigher scores = more behaviors the participants would punish (item range = 0 - 1), maximum total score = 36.

Table 8

Child Rearing Inventory Item Content, Item Mean, Item Standard Deviation, and Item-Total Correlation

Item Content	Mean	SD	Item-Total ^a
1. Bothered by annoying child behavior	2.44	1.02	.47
2. Bothered by noncompliance	3.30	.89	.46
3. Bothered by child who interrupts	2.96	.91	.40
4. Severity of response to misbehavior	2.17	.87	.28
5. Bothered by child who talks back	3.47	.76	.42
6. Bothered by yelling child	2.63	.94	.34
7. Severity of punishment used	1.96	.67	.19
8. Bothered by phone interruptions	2.91	.95	.40
9. Annoyed by yelling child who bothers others	3.31	.75	.34
10. Bothered by whining	3.10	.90	.41
11. Severity of discipline style	2.52	.97	.29

^aCorrected item-total correlation coefficient (n = 246).

Table 9

Annoying Behavior Inventory Item Content, Annoyance Scale Item Mean,
Annoyance Scale Item Standard Deviation, and Item-Total Correlation

Item Content	Mean	SD	Item-Total ^a
1. Wanting own way	1.69	.88	.42
2. Arguing with friends	1.31	.86	.42
3. Arguing with siblings	1.62	.90	.38
4. Biting others	2.62	.79	.39
5. Crying for no reason	1.71	.96	.46
6. Dawdling	1.33	.88	.36
7. Defiance	2.34	.78	.57
8. Destructiveness	2.56	.79	.51
9. Fighting with friends	1.93	.96	.47
10. Fighting with siblings	2.04	.90	.50
11. Fire-setting	2.80	.66	.35
12. Hitting others	2.56	.72	.51
13. Hurting pets or animals	2.59	.79	.51
14. Irritability	1.19	.76	.56
15. Jumping on furniture	1.50	.91	.54
16. Kicking others	2.47	.76	.62
17. Lying	2.52	.73	.52
18. Nagging	1.57	.87	.60
19. Namecalling	1.75	.87	.50
20. Noisiness	1.30	.85	.52
21. Noncompliance	2.23	.76	.61
22. Not eating at meal time	1.03	.84	.27
23. Pushing others	2.02	.82	.53
24. Pouting	1.23	.86	.46
25. Rough play	1.36	.86	.35
26. Running away	2.54	.79	.44
27. Slamming doors	1.86	.91	.61
28. Stealing	2.80	.61	.48
29. Talking back to adults	2.61	.72	.50
30. Talking mean to others	2.43	.74	.62
31. Teasing	1.74	.88	.47
32. Temper tantrums	2.13	.87	.56
33. Verbally threatening others	2.41	.82	.55
34. Cursing	2.55	.79	.53
35. Whining	1.68	.85	.59
36. Yelling	1.70	.87	.58

^aCorrected item-total correlation coefficient ($n = 235$).

Table 10

Annoying Behavior Inventory Punish Scale Item-Total Correlation

Item Content	Item-Total ^a
1. Wanting own way	.52
2. Arguing with friends	.58
3. Arguing with siblings	.60
4. Biting others	.32
5. Crying for no reason	.51
6. Dawdling	.58
7. Defiance	.52
8. Destructiveness	.37
9. Fighting with friends	.51
10. Fighting with siblings	.52
11. Fire-setting	.26
12. Hitting others	.39
13. Hurting pets or animals	.41
14. Irritability	.51
15. Jumping on furniture	.58
16. Kicking others	.50
17. Lying	.46
18. Nagging	.62
19. Namecalling	.60
20. Noisiness	.57
21. Noncompliance	.55
22. Not eating at meal time	.52
23. Pushing others	.58
24. Pouting	.42
25. Rough play	.49
26. Running away	.45
27. Slamming doors	.60
28. Stealing	.28
29. Talking back to adults	.40
30. Talking mean to others	.58
31. Teasing	.57
32. Temper tantrums	.49
33. Verbally threatening others	.51
34. Cursing	.43
35. Whining	.55
36. Yelling	.63

^aCorrected item-total correlation coefficient (n = 230).

Table 11
Two Week Test-Retest Reliability

Variable	1	2	3	4	5	6
1. Child Rearing Inventory Time 1	---					
2. Child Rearing Inventory Time 2	.69***	---				
3. Annoyance Time 1	.39***	.55***	---			
4. Annoyance Time 2	.49***	.49***	.68***	---		
5. Punish Time 1	.18**	.20	.14*	.26	---	
6. Punish Time 2	.21	.06	.37**	.39**	.62***	---
<u>M</u>	30.78 ^a	30.57 ^b	71.51 ^c	71.80 ^d	16.51 ^e	17.58 ^f
<u>SD</u>	4.95	5.04	15.77	14.33	8.01	7.74

Note. Annoyance = ABI Annoyance Scale; Punish = ABI Punish Scale.

^an = 246, ^bn = 53, ^cn = 242, ^dn = 55, ^en = 237, ^fn = 52.

*p < .05. **p < .01. ***p < .0001.

Table 12

Correlation Matrix of Variables with Means and Standard Deviations

Variable	1	2	3	4	5	6	7	8	9	10	11
1. CRI	---										
2. Annoyance	.39***	---									
3. Punish	.18**	.14*	---								
4. Intensity	.10	-.02	.01	---							
5. Problem	.23***	.09	.01	.65***	---						
6. M-C SDS	-.04	-.08	-.04	-.35***	-.17**	---					
7. LES	.01	.11	-.02	-.11*	-.09	.15*	---				
8. Child's Age	.20**	.13*	.11*	-.00	.04	.04	-.05	---			
9. Number of Children	.14*	.13	.03	.02	.08	.10	-.12	.16*	---		
10. Mothers' age	.04	.14*	.22***	.04	.02	.00	-.00	.25***	.19**	---	
11. SES	-.07	-.00	.06	-.01	-.04	-.23***	.05	-.13*	-.07	.14*	---
M	(n = 246) 30.78	(n = 242) 71.52	(n = 237) 16.51	(n = 240) 96.65	(n = 233) 8.19	(n = 233) 20.86	(n = 223) -5.07	(n = 262) 5.76	(n = 181) 1.44	(n = 261) 33.80	(n = 262) 37.16
SD	4.95	15.77	8.00	29.85	7.34	5.40	7.20	2.07	1.37	8.58	13.56

Note. CRI = Child Rearing Inventory; Annoyance = Annoying Behavior Inventory Annoyance Scale; Punish = Annoying Behavior Inventory Punish Scale; Intensity = Eyberg Child Behavior Inventory Intensity Scale; Problem = Eyberg Child Behavior Inventory Problem Scale; M-C SDS = Marlowe-Crowne Social Desirability Scale; LES = negative change score from the Life Experiences Survey; SES = Hollingshead Socioeconomic Scale. P values are one-tailed.

* $p < .05$. ** $p < .01$. *** $p < .0001$.

Table 13

Correlation Matrix of Childrearing Inventory Scales and the Study Variables

Variable	Bothered by Child	Discipline	CRI Total
1. Bothered by Child	--		
2. Discipline	.17**	--	
3. CRI Total	.92**	.54**	--
4. Annoy	.39**	.15*	.39**
5. Punish	.16*	.12*	.18**
6. Intensity	.18**	-.15*	.10
7. Problem	.30**	-.07	.23**
8. M-C SDS	-.06	.02	-.04
9. LES	-.02	.08	.01
10. Child's Age	.17**	.14*	.20**
11. Number of Children	.24**	-.16*	.14*
12. Mother's Age	.04	.02	.04
13. SES	-.14**	.12*	-.07

Note. Bothered by Child = Child Rearing Inventory Bothered by Child Scale; Discipline = Child Rearing Inventory Discipline Scale; CRI Total = Child Rearing Inventory Total Score; Annoyance = Annoying Behavior Inventory Annoyance Scale; Punish = Annoying Behavior Inventory Punish Scale; Intensity = Eyberg Child Behavior Inventory Intensity Scale; Problem = Eyberg Child Behavior Inventory Problem Scale; M-C SDS = Marlowe-Crowne Social Desirability Scale; LES = negative change score from the Life Experiences Survey; SES = Hollingshead Socioeconomic Scale. P values are one-tailed.

*P < .05. **P < .01. ***P < .0001.

Table 14

Means and Standard Deviations for the Eyberg Child Behavior
Inventory Intensity and Problem Scales

	Total	Caucasian	African American
ECBI Intensity	(n = 225)	(n = 141)	(n = 84)
Total Score (SD) ^a	96.65 (29.8)	99.25 (29.4)	92.06 (30.3)
[Coefficient alpha]	[.93]	[.93]	[.93]
ECBI Problem	(n = 225)	(n = 141)	(n = 84)
Total Score (SD) ^b	8.18 (7.3)	8.75 (7.5)	7.20 (6.9)
[Coefficient alpha]	[.91]	[.92]	[.91]

^aHigher scores = more frequent disruptive behavior (item range = 1 - 7), maximum total score = 252.

^bHigher scores = more problematic behavior (item range = 0 - 1), maximum total score = 36.

Table 15

Results of Hierarchical Multiple-Regression Analysis for the Dependent Variable of Frequency of Behavior Problems as Measured by the Eyberg Child Behavior Inventory Intensity Scale

Step	Variables in equation	B	t	P <	Adjusted R ²	F (df)	P <
1	Intercept	87.60	10.08	.000	-.001	.871 (2, 237)	.420
	Child Age	.21	.22	.828			
	Gender	5.13	1.32	.189			
2	Intercept	85.37	8.15	.000	-.003	.680 (2, 231)	.507
	Mother Age	.16	.70	.485			
	Marital Status	4.15	1.03	.305			
3	Intercept	94.96	11.83	.000	-.013	.503 (4, 148)	.734
	LES	-.47	-1.38	.169			
	Number of Children	.00	.01	.996			
	SES	-.01	-.06	.949			
	Chronic Illness	-1.41	-.23	.815			
4	Intercept	70.55	4.84	.000	.009	3.256 (1, 238)	.072
	Race	7.18	1.80	.072			
5	Intercept	136.95	18.51	.000	.118	31.647 (1, 227)	.000
	M-C SDS	-1.93	-5.63	.000			
6	Intercept	121.74	8.71	.000	.121	16.622 (2, 225)	.000
	CRI	.48	1.28	.201			
	M-C SDS	-1.91	-5.56	.000			

Table 15 Continued

Step	Variables in equation	B	t	P <	Adjusted R ²	F (df)	P <
7	Intercept	144.00	11.81	.000	.113	10.449 (3, 220)	.000
	ABI Annoyance	-.09	-.76	.446			
	ABI Punish	.00	.01	.995			
	M-C SDS	-1.95	-5.59	.000			

Note. LES = total negative change score on the Life Experiences Survey; SES = Hollingshead Socioeconomic Status; M-C SDS = Marlowe-Crowne Social Desirability Scale; CRI = Child Rearing Inventory; ABI Annoyance = Annoying Behavior Inventory Annoyance Scale; ABI Punish = Annoying Behavior Inventory Punish Scale.

Table 16

Results of Hierarchical Multiple-Regression Analysis for the Dependent Variable of Problem Behavior as Measured by the Eyberg Child Behavior Inventory Problem Scale

Step	Variables in equation	B	t	P <	Adjusted R ²	F (df)	P <
1	Intercept	5.39	2.49	.014	-.001	.919 (2, 230)	.400
	Child Age	.17	.72	.470			
	Gender	1.18	1.22	.224			
2	Intercept	6.78	2.59	.010	-.007	.166 (2, 224)	.847
	Mother Age	.02	.36	.718			
	Marital Status	.50	.50	.619			
3	Intercept	8.08	4.10	.000	-.010	.641 (4, 148)	.634
	LES	-.08	-1.00	.319			
	Number of Children	.36	.80	.425			
	SES	-.02	-.39	.701			
	Chronic Illness	-.88	-.60	.552			
4	Intercept	2.54	.70	.488	.006	2.443 (1, 231)	.119
	Race	1.56	1.56	.119			
5	Intercept	13.01	6.71	.000	.025	6.588 (1, 221)	.011
	M-C SDS	-.23	-2.57	.011			
6	Intercept	2.48	.70	.488	.071	9.486 (2, 220)	.000
	CRI	.33	3.47	.001			
	M-C SDS	-.22	-2.48	.014			

Table 16 Continued

Step	Variables in equation	B	t	P <	Adjusted R ²	F (df)	P <
7	Intercept	2.87	.75	.452	.064	4.779 (4, 218)	.001
	ABI Annoyance	-.00	-.09	.930			
	ABI Punish	-.03	-.53	.600			
	CRI	.35	3.27	.001			
	M-C SDS	-.22	-2.49	.014			

Note. LES = total negative change score on the Life Experiences Survey; SES = Hollingshead Socioeconomic Status; M-C SDS = Marlowe-Crowne Social Desirability Scale; CRI = Child Rearing Inventory; ABI Annoyance = Annoying Behavior Inventory Annoyance Scale; ABI Punish = Annoying Behavior Inventory Punish Scale.

Table 17

Means and Standard Deviations for the Life Experiences Survey and the Marlowe-Crowne Social Desirability Scale

	Total	Caucasian	African American
LES	(n = 223)	(n = 147)	(n = 76)
Total Negative Change	-5.07 (7.2)	-5.05 (7.7)	-5.12 (6.1)
Score (SD) ^a			
[Coefficient alpha]	[.78]	[.82]	[.69]
M-C SDS	(n = 233)	(n = 150)	(n = 83)
Total Score (SD) ^b	20.86 (5.4)	20.17 (5.5)	22.11 (4.9)
[Coefficient alpha]	[.80]	[.82]	[.76]

Note. LES = Life Experiences Survey; M-C SDS = Marlowe-Crowne Social Desirability Scale.

^aLower scores = greater perceived stress (item range = -3 to +3); maximum total score = -219.

^bHigher scores = greater social desirability (item range = 0 - 1); maximum total score = 33.

Table 18

Results of Hierarchical Multiple-Regression Analysis for the Dependent Variable of Social Desirability as Measured by the Marlowe-Crowne Social Desirability Scale

Step	Variables in equation	B	t	P <	Adjusted R ²	F (df)	P <
1	Intercept	18.33	11.51	.000	.004	1.425 (2, 231)	.243
	Child Age	.15	.84	.401			
	Gender	1.10	1.55	.123			
2	Intercept	20.03	10.39	.000	-.007	.194 (2, 224)	.824
	Mother Age	.01	.12	.903			
	Marital Status	.46	.62	.534			
3	Intercept	27.87	10.48	.000	.026	7.083 (1, 231)	.008
	Race	-1.93	-2.66	.008			
4	Intercept	24.26	24.05	.000	.049	12.874 (1, 231)	.000
	SES	-.10	-3.59	.000			
5	Intercept	28.44	10.85	.000	.057	7.980 (2, 230)	.000
	SES	-.08	-2.94	.004			
	Race	-1.29	-1.72	.086			

Note. SES = Hollingshead Socioeconomic Status.

Table 19

Results of Hierarchical Multiple-Regression Analysis for the Dependent Variable of Tolerance as Measured by the Child Rearing Inventory

Step	Variables in equation	B	t	P <	Adjusted R ²	F (df)	P <
1	Intercept	28.30	20.19	.000	.033	5.141 (2, 243)	.007
	Child Age	.48	3.15	.002			
	Gender	-.17	-.27	.786			
2	Intercept	28.38	15.97	.000	.028	3.342 (3, 237)	.020
	Mother Age	-.00	-.13	.893			
	Marital Status	-.16	-.25	.804			
	Child Age	.49	3.08	.002			
3	Intercept	28.74	16.34	.000	.031	1.972 (5, 147)	.086
	LES	.02	.43	.669			
	Number of Children	.38	1.29	.199			
	SES	-.02	-.61	.543			
	Chronic Illness	.38	1.29	.308			
	Child Age	.43	2.22	.028			
4	Intercept	30.04	12.06	.000	.035	5.501 (2, 243)	.005
	Race	-.56	-.88	.382			
	Child Age	.49	3.22	.001			
5	Intercept	28.97	18.82	.000	.034	5.051 (2, 225)	.007
	M-C SDS	-.05	-.79	.429			
	Child Age	.49	3.11	.002			
6	Intercept	19.62	12.52	.000	.179	17.613 (3, 226)	.000
	ABI Annoyance	.11	5.89	.000			
	ABI Punish	.06	1.83	.068			
	Child Age	.34	2.34	.020			

Note. LES = total negative change score on the Life Experiences Survey; SES = Hollingshead Socioeconomic Status; M-C SDS = Marlowe-Crowne Social Desirability Scale; ABI Annoyance = Annoying Behavior Inventory Annoyance Scale; ABI Punish = Annoying Behavior Inventory Punish Scale.

Table 20

Results of Hierarchical Multiple-Regression Analysis for the Dependent Variable of Annoyance with Child Misbehavior as Measured by the Annoying Behavior Inventory Annoyance Scale

Step	Variables in equation	B	t	P <	Adjusted R ²	F (df)	P <
1	Intercept	70.13	15.54	.000	-.008	.074 (2, 232)	.929
	Marital Status	.13	.06	.952			
	Gender	.79	.38	.703			
2	Intercept	81.79	10.62	.000	.003	1.810 (1, 240)	.180
	Race	-2.83	-1.35	.180			
3	Intercept	70.80	16.84	.000	.005	1.183 (4, 148)	.321
	LES	.27	1.48	.140			
	Number of Children	1.60	1.69	.094			
	SES	-.00	-.02	.981			
	Chronic Illness	-.72	-.23	.820			
4	Intercept	76.53	18.36	.000	.002	1.543 (1, 226)	.215
	M-C SDS	-.24	-1.24	.215			
5	Intercept	65.79	22.01	.000	.013	4.135 (1, 240)	.043
	Child Age	.99	2.03	.043			
6	Intercept	62.58	15.25	.000	.017	5.048 (1, 239)	.026
	Mother Age	.27	2.25	.026			

Note. LES = total negative change score on the Life Experiences Survey; SES = Hollingshead Socioeconomic Status; M-C SDS = Marlowe-Crowne Social Desirability Scale.

Table 21

Results of Hierarchical Multiple-Regression Analysis for the Dependent Variable of Perceived Appropriateness of Punishment for Child Misbehavior as Measured by the Annoying Behavior Inventory Punish Scale

Step	Variables in equation	B	t	P <	Adjusted R ²	F (df)	P <
1	Intercept	13.63	5.82	.000	.004	1.416 (2, 234)	.245
	Child Age	.43	1.68	.094			
	Gender	.28	.26	.793			
2	Intercept	10.98	2.01	.045	.039	4.114 (3, 226)	.007
	Mother Age	.20	3.25	.001			
	Marital Status	-.87	-.76	.449			
	Race	.00	.00	.997			
3	Intercept	8.23	2.68	.008	.025	1.789 (5, 147)	.119
	LES	-.03	-.30	.762			
	Number of Children	.00	.00	.998			
	SES	.02	.40	.687			
	Chronic Illness	.00	.00	.998			
	Mother Age	.21	2.71	.008			
4	Intercept	10.82	3.68	.000	.042	5.909 (2, 221)	.003
	M-C SDS	-.06	-.64	.522			
	Mother Age	.21	3.38	.001			

Note. LES = total negative change score on the Life Experiences Survey; SES = Hollingshead Socioeconomic Status; M-C SDS = Marlowe-Crowne Social Desirability Scale.

Table 22

Results of Hierarchical Multiple-Regression Analysis for the Dependent Variable of Referral Status as Measured by the Demographic Questionnaire

Step	Variables in equation	B	SE	P <	R	Odds Ratio
1	Intercept	-9.84	2.38	.000		
	Child Age	.51	.11	.000	.31	1.67
	Gender	-1.95	.52	.000	.25	.14
	Race	-.35	.45	.432	.00	.70
2	Intercept	-8.22	1.61	.000		
	Child Age	.46	.13	.000	.28	1.59
	Gender	-1.93	.63	.002	.24	.14
	Number of Children	-.02	.19	.933	.00	.98
	Chronic Illness	-.22	.61	.718	.00	1.25
3	Intercept	-10.78	2.00	.000		
	Child Age	.49	.12	.000	.29	1.63
	Gender	-1.86	.55	.000	.23	.15
	Mother Age	.03	.02	.170	.00	1.03
	Marital Status	-.93	.47	.044	.11	.39
	SES	.00	.02	.849	.00	.99
4	Intercept	-5.00	1.65	.002		
	Child Age	.67	.15	.000	.35	1.96
	Gender	-2.07	.65	.001	-.24	.13
	Marital Status	-1.33	.55	.015	-.17	.27
	M-C SDS	-.00	.05	.939	.00	1.00
	LES	.05	.05	.323	.00	1.05

Table 22 Continued

Step	Variables in equation	B	SE	P <	R	Odds Ratio
5	Intercept	-15.80	2.76	.000		
	Child Age	.69	.17	.000	.31	1.98
	Gender	1.95	.67	.004	.20	7.00
	Marital Status	.88	.56	.111	.06	2.42
	ECBI Intensity	.04	.01	.002	.22	1.04
	ECBI Problem	.07	.04	.118	.06	1.07
6	Intercept	-15.93	3.04	.000		
	Child Age	.60	.15	.000	.29	1.82
	Gender	2.19	.68	.001	.23	8.95
	ECBI Intensity	.04	.01	.000	.32	1.04
	CRI	.06	.06	.313	.00	1.06
7	Intercept	-14.20	2.57	.000		
	Child Age	.60	.16	.000	.28	1.83
	Gender	-2.08	.68	.002	-.21	.12
	ECBI Intensity	.05	.01	.000	.35	1.05
	ABI Annoyance	.05	.02	.041	.12	1.05
	ABI Punish	.03	.03	.285	.00	1.03

Note. SES = Hollingshead Socioeconomic Status; M-C SDS = Marlowe-Crowne Social Desirability Scale; LES = total negative change score on the Life Experiences Survey; ECBI Intensity = Eyberg Child Behavior Inventory Intensity Scale; ECBI Problem = Eyberg Child Behavior Inventory Problem Scale; CRI = Child Rearing Inventory; ABI Annoyance = Annoying Behavior Inventory Annoyance Scale; ABI Punish = Annoying Behavior Inventory Punish Scale.

Table 23
Correlations Between Annoying Behavior Inventory Annoyance Scale Items and
the Child Rearing Inventory Total Score

ABI Annoyance Scale Item Content	Correlation with Child Rearing Inventory Total Score ^a
1. Wanting own way***	.33
2. Arguing with friends**	.20
3. Arguing with siblings***	.24
4. Biting others	.13
5. Crying for no reason**	.21
6. Dawdling***	.38
7. Defiance***	.46
8. Destructiveness	.10
9. Fighting with friends**	.21
10. Fighting with siblings***	.25
11. Fire-setting	-.09
12. Hitting others**	.20
13. Hurting pets or animals	.10
14. Irritability***	.26
15. Jumping on furniture**	.19
16. Kicking others	.12
17. Lying**	.23
18. Nagging***	.27
19. Namecalling	.17
20. Noisiness***	.27
21. Noncompliance***	.36
22. Not eating at meal time	.14
23. Pushing others	.05
24. Pouting***	.24
25. Rough play	.07
26. Running away	.08
27. Slamming doors***	.30
28. Stealing	.03
29. Talking back to adults***	.28
30. Talking mean to others**	.20
31. Teasing	.13
32. Temper tantrums***	.28
33. Verbally threatening others**	.18
34. Cursing**	.20
35. Whining***	.24
36. Yelling***	.27

Note. ABI = Annoying Behavior Inventory.

^an = 235. **p < .01, ***p < .001, significant using Bonferroni-Holm adjustment.

DISCUSSION

This study investigated the initial psychometric properties of the Child Rearing Inventory (CRI) and the Annoying Behavior Inventory (ABI), two newly developed parent report measures of tolerance. A self report methodology was used to assess mothers' beliefs regarding child behavior through the use of the two tolerance questionnaires developed for this study, a well standardized parent report measure of behavior problems, a measure of social desirability, and a measure of life experiences. This study is an important contribution to the parenting literature in that it is the first study to define and measure parental tolerance for misbehavior. The CRI and the ABI offer brief, self report measures for use in the assessment of dysfunctional parenting and the related disruptive behavior problems of pre-school and school-aged children. The results of this study support the initial reliability and validity of the CRI and ABI as measures of parental attitudes towards child misbehavior.

The study also assessed the relation between demographic variables and tolerance by using multiple regression techniques to predict race, age, and gender effects among the study variables. Logistic regression was used to determine the differential utility of tolerance and parent report for child behavior problems in predicting referral status.

Reliability Analyses

Results of this study support the reliability of the tolerance measures. The data also support the internal consistency of the parent report measure for child misbehavior, the

social desirability measure, and the life experiences measures among the African American and Caucasian groups.

Child Rearing Inventory

Three items with poor item-to total correlations were dropped from the original 14 item CRI to create an 11 item CRI. A factor analysis conducted with the 11 item CRI yielded 2 factors that accounted for 43% of the variance. The internal consistency of factor 1, labeled bothered by child, was good for the total sample (.74) while the internal consistency of factor 2, labeled discipline, was adequate (.65). All subsequent analyses were conducted with the 11 item CRI.

The CRI was found to have a good coefficient alpha in the total sample (.72) and to have adequate two-week test-retest reliability (.69) in a subset of 53 participants. The reliability estimates were high, and they suggest that the CRI can be used in conjunction with other measures for the assessment of child misbehavior. The internal consistency coefficients were somewhat stronger in the Caucasian sample (.73) but reliability estimates were good for both the Caucasian sample and the African American sample (.70).

Annoying Behavior Inventory

The ABI Annoyance Scale (coefficient alpha = .93) and ABI Punish Scale (coefficient alpha = .93) had excellent reliability for the total sample as well as adequate two-week test-retest reliability. Coefficient alpha was comparable for the Caucasian (Annoyance = .94; Punish = .92) and African American sample (Annoyance = .92; Punish = .94) on both the Annoyance and Punish Scales.

The test-retest reliability of the ABI Annoyance (.68) and Punish Scales (.62) was lower than expected and lower relative to the CRI (.72). A possible reason for the marginal test-retest reliability is that some participants had difficulty understanding the directions of the ABI. Many mothers thought the ABI was to be answered for their child's actual behavior rather than for child misbehavior in general. As a result, some mothers initially rated extreme misbehaviors with low scores and when queried explained "this is not annoying because my child does not do this." Mothers also expressed confusion regarding the directions for the ABI Punish Scale, in which they are asked to "circle the behavior that you think a child should be punished or reprimanded" for displaying. The Punish Scale appears to be a less straightforward measure in that the terms "punish or reprimand" can include a wide range of discipline behaviors that are subjective and mean different things to different people. It is possible that together, these issues negatively influenced the test-retest reliability of the ABI. Thus, the reliability estimates obtained from this sample on the ABI Annoyance and Punish Scales are likely to be conservative.

Eyberg Child Behavior Inventory

The ECBI reliability estimates for the Intensity Scale and Problem Scale were comparable to the normative sample (Colvin, Eyberg, & Adams, 1998). Coefficient alphas were also comparable between the African American sample and the Caucasian sample in this study.

ECBI Problem scores for the Caucasian group ($\underline{M} = 8.7$, $\underline{SD} = 7.5$) were significantly different and higher than the normative sample ($\underline{M} = 7.1$; $\underline{SD} = 7.7$) but there was no difference between the two groups on the ECBI Intensity Scale. The ECBI

scores for the African American group were not significantly different from the normative group on the Intensity or Problem Scales. It is possible that the elevated scores for the Caucasian group on the ECBI Problem Scale were affected by the group's responses to the tolerance measures which also dealt with problematic behavior; however, this is not likely because the measures from this study were completed in counterbalanced order to help control for the potential influence of order of administration effects.

Marlowe-Crowne Social Desirability Scale

The M-C SDS coefficient alpha for the total sample (.80) was lower than the reliability estimate for the normative sample (.88) reported by Crowne and Marlowe (1960) but this estimate was comparable to the reliability coefficients reported by other investigators (.73 for 130 university females; .83 for 64 university males; .73 for a coed sample of 163 college students; .75 for 399 university students; .82 for 608 university students; Strahan & Gerbasi, 1972; Nordholm, 1974; Reynolds, 1982; Ballard, 1992). The coefficient alpha reliability estimates for the African American group (.76) and the Caucasian group (.82) were adequate.

Life Experiences Survey

For the LES, internal consistency estimates (negative change score coefficient alpha = .78; time since event coefficient alpha = .75) were adequate. Although Sarason et al. (1978) did not report coefficient alpha data for their samples, they calculated test-retest reliability for two samples, one sample consisting of 34 participants, the other sample consisting of 58 participants. The reliabilities in the two samples were somewhat discrepant for the positive change score (.19 versus .53) and the negative change score (.56 versus .88). The investigators observed that the LES negative change score and the

LES total change score are more stable measures of life stress than the LES positive change score.

Comparisons of LES performance between the participants in the LES standardization study sample and the present study are limited in that test-retest reliability data are not available for the present study. For the LES total negative change score, the coefficient alpha for the African American group (.69) and the Caucasian group (.82) were adequate. The fluctuation in alphas across samples suggests that item interpretation may be different for different demographic groups and should perhaps be assessed within each study sample to determine suitability.

LES negative change scores for the Caucasian and African American groups were significantly different and lower than the normative sample. This sample's tendency to report fewer negative life events may be due to social desirability as there was a significant, albeit small, correlation between the LES and the M-C SDS. This report of fewer negative life events could also be due to differences between the two samples as the pretest study included a wide distribution of age and educational background. Although Sarason et al. (1978) did not examine the relation between the LES and social desirability, Beehr (1983) found a significant and positive relation (.20) between the LES frequency of negative life events and the M-C SDS.

Demographics

Demographic data revealed that the participants of this study included a wide range of ages (19 to 70 years). The majority of the participants were married, Caucasian, and half of them had at least one other child. The women recruited for this study represented a wide distribution of SES, with more women in the low to moderate SES levels.

There was an unequal number of African American and Caucasian participants in this study and despite efforts to collect data from equal numbers from both groups, Caucasians were over represented in the sample. There were several demographic differences between the African American and Caucasian participants of this study including a statistically significant difference in SES with the African American group having a lower mean SES relative to the Caucasian group. The African American group reported a significantly different and lower income relative to the Caucasian group. Overall, there are few meaningful differences between the two racial groups and it appears that, with the exception of social desirability, they responded to the measures in a similar fashion.

There was an equal number of males and females identified as the child under study and there was an even distribution of ages for the target age range (3 - 10 years). There was a gender effect for treatment variables with a greater percentage of the males in the study having a behavior problem, needing treatment for a behavior problem, having been teacher referred for the treatment of a behavior problem, or having been treated for a problem behavior. The gender difference observed in this sample for referral and treatment status (approximately 4:1) is consistent with the prevalence rates reported for disruptive behavior disorders in the DSM-IV (American Psychiatric Association, 1994).

Validity of the CRI Scales

A preliminary investigation into the utility of using two scales for the CRI was conducted by examining the relation between the two scales and the other study variables. The relation of the CRI Bothered By Child Scale to the other study variables through correlations and multiple regression was comparable to that of the CRI total score.

Additionally, the relationship between the CRI Discipline Scale to the other study variables was similar to the CRI with few exceptions.

Perceived severity of discipline was significantly related to the number of children in the family ($r = -.16$), with a trend for mothers with larger families to report using less severe punishment. Based on the items from this scale, this relation likely reflects mothers' tendency to "let their child get away with too much" as mothers anecdotally reported that it is difficult to use consistent discipline with several children at the same time.

There was also a small but significant trend for mothers from high SES backgrounds to report using more strict discipline with their children ($r = .12$). This relation is contrary to previous research finding a link between harsh discipline and mothers from lower SES backgrounds (Dodge et al., 1994) and could be due to the limited ability of this scale to define discipline. For this reason, future study with the CRI should consider the utility of the Punishment Scale by addressing its relationship to more empirically supported measures of discipline.

Relation Between Tolerance and Study Variables

The thrust of this study centered around the definition of tolerance and the development of two measures that could reliably assess this construct. The CRI and ABI appear to provide good measurement of the tolerance construct and among the correlations between study variables, the highest correlation coefficients were obtained between these measures. This significant relation was expected as the ABI and the CRI were both designed to assess tolerance; however, the correlations between these measures

were moderate in size, suggesting that they assess related, but not identical, aspects of tolerance.

Punishment is an important aspect of parent-child interactions as parents often react to negative child behavior with some form of punishment (e.g., spank, time-out). The small but significant correlations between the ABI Punish Scale and the CRI and between the ABI Punish and Annoyance Scale scores suggest that while the constructs of annoyance with misbehavior and perceived appropriateness of punishment are very different conceptually, they are closely related. This relation represents an interesting link between a parent's perception of behavior as annoying and whether they choose to "do something" about the behavior. The positive direction of this relationship suggests that the more annoyance a parent reports in response to a behavior, the greater their tendency to respond to the child with some form of punishment.

Regression analyses indicate that less parental tolerance for child behavior, as measured by the CRI, was best predicted by the following: (1) increasing child age, and (2) greater annoyance with child misbehavior in general. Child age was the single best predictor of tolerance as measured by the CRI.

Age was hypothesized to be an important variable in the study of tolerance because previous investigators (Dix et al., 1986; Johnson & Patenaude, 1994) have found parents of nonproblem children to perceive older children as having more control over their behavior than younger children and to rate the misbehavior of the older children as more distressing than misbehavior attributed to younger children. The relation between child age and tolerance found in this study supports previous research and suggests that parents are more intolerant of the misbehavior of older children. Taken together, these results

suggest that a parent's expectations for child behavior are influenced by the child's age and that a parent is willing to tolerate more acting out behaviors (such as jumping on furniture, hitting others, and temper tantrums) when children are younger. From a developmental perspective, it is appropriate for parents to have more tolerance for the misbehavior of young children as this allows the child time to mature and to learn what behavior is expected of them. It is interesting to note that the intolerant parents from this study are not those who expect too much from children at a young age but those parents who have older children and find child behavior annoying.

Greater tendency to act in response to child misbehavior, while not significant, was an important predictor of tolerance as measured by the CRI. This finding suggests that intolerant parents are more likely to "overreact" rather than "under-react" to child behavior. The ABI Punish Scale is a subjective measure of punishment and further study with a more specific measure of punishment may highlight a greater predictive relation between tolerance and punishment. Additionally, future study into the severity and timing of punishment will also prove important for understanding the progression from parental annoyance with misbehavior to action that is aimed at stopping the behavior.

Taking the regression analyses into account, it appears that the CRI and the ABI provide different but complimentary measures of tolerance. These analyses also suggest that to obtain information about a parent's tolerance level it is important to note their annoyance with child behavior in general, their report of how bothersome they find their child's behavior, and their tendency to respond to misbehavior with some form of punishment.

Behavior Problems

It was hypothesized that the ECBI and tolerance would be closely related and that tolerance would predict child behavior problems. The correlations between the ECBI Intensity Scale and the CRI and ABI Scales were small in magnitude and neither tolerance measure was a significant predictor of the ECBI Intensity Scale. Although the CRI did not predict scores on the ECBI Intensity Scale, the CRI was found to be the single best predictor of the ECBI Problem Score which has long been hypothesized to provide an indirect assessment of tolerance. Based on the significant and direct link between the CRI and the ECBI Problem Scale, it appears that less tolerance for misbehavior is related to mothers' report of greater problematic behavior. The strong correlation between the face valid tolerance scale and the ECBI Problem Scale provides a second strong test of concurrent validity and it supports the hypothesis that the ECBI Problem Scale provides an indirect assessment of tolerance.

The ECBI provides information regarding parental perception of child behavior problems. One explanation for the lack of a direct relationship between tolerance and frequency of behavior problems as measured by the ECBI Intensity Scale is that parental tolerance is not related to parental report of child behavior problems. An alternative explanation is that tolerance is related to actual behavior problems but that the parents from this sample were not accurate in their report on the ECBI. It is likely that the severity of a child's behavior problems is important to the development and maintenance of parental intolerance for misbehavior as the ECBI Problem Scale mediates an indirect link between tolerance and frequency of child disruptive behavior. The positive direction

of this relation suggests that parents with less tolerance, as measured by the CRI, are more likely to rate their children as displaying a greater frequency of negative behaviors.

There are several possibilities for the development of a relationship between tolerance and behavior problems. As there was a direct link between tolerance and the ECBI Problem Scale, a parent's experience of child behavior as problematic may be more important than the child's actual behavior in the development and maintenance of intolerant attitudes towards child behavior. It may be that increased exposure to a child with behavior problems results in less parental tolerance for child behavior problems. Alternatively, the development of child disruptive behavior problems may be contributed by a parent's lack of tolerance for disruptive behavior. A combination of these processes is the more likely scenario. Regardless of the developmental trajectory of behavior problems and tolerance, the distinction between the role of actual and perceived behavior problems in this process can only be elucidated through the use of behavioral observation methodology.

Previous examination of the ECBI provided strong evidence that the measure is not influenced by social desirability (Robinson & Anderson, 1983), however, there was a strong link between SES, the M-C SDS, and the ECBI scales for this sample. The Robinson and Anderson sample differed from the present study in that it included a smaller sample ($n = 138$) that was 95% Caucasian and included a large percentage of parents with college (74%) and advanced degrees (31%). The present sample was not as well educated (23% had 16 years or more of education) and included a more racially diverse sample. The Robinson and Anderson study also used the Edwards Social Desirability Scale (Edwards, 1953) rather than the M-C SDS, which may have

contributed to the role of social desirability as a significant predictor of behavior problems in this study. The relation between SES, social desirability, and the ECBI for the present study suggests that education and socially acceptable response sets influenced mothers' report of child behavior problems. Further study with the ECBI may be warranted to determine the extent to which social desirability influences this parent report measure of behavior problems.

Referral Status

It was hypothesized that examination of the relation between tolerance and child behavior problems would contribute to our understanding of why, how, and when a child is identified as needing treatment for behavior problems. Specifically, it was hypothesized that the CRI and the ABI would predict child referral status. Based on logistic regression analysis, the ABI Annoyance Scale, the ECBI Intensity Scale, gender, and child age all significantly predicted child referral status.

The regression analyses suggest that parents are more likely to refer their children for treatment when they are greatly annoyed by child misbehavior. The importance of the ABI Annoyance Scale for predicting referral status is consistent with the hypothesized role of tolerance in predicting behavior problems. An indirect link between tolerance and referral status also emerges when one takes into account the relationship between the CRI, the ECBI Scales, and referral status. Parents must use some personal standard to decide when a child needs treatment for behavior problems and it appears that becoming annoyed by misbehavior is related to the progression from thinking that a child needs treatment to actually obtaining treatment for them. Further study with clinic-referred children and their mothers should address whether a third variable not assessed by this

study (such as school suspensions or parental stress regarding child related events) plays a part in the progression from contemplation to actively seeking change.

The regression analyses also suggest that parents are more likely to refer their children for treatment when they perceive the child as having a high frequency of behavior problems. As such, it appears that a parent's perception of child behavior problems also plays a part in their decision to seek treatment. Based on the ECBI, nineteen percent of the children in this study could have benefited from treatment as they were rated as having a clinically significant number of behavior problems. As such, preventive parenting information and/or referral for child behavior management instruction through their pediatrician's office could be helpful for one fourth of the parents in this study.

For this sample, child variables were also important predictors of referral status. In addition to its importance for predicting tolerance, greater child age significantly predicted referral status. Gender was also linked to referral status as the males in this study were more likely to have received treatment for behavior problems than females. This is consistent with the prevalence rates reported among males for disruptive behavior disorders in the DSM-IV (American Psychiatric Association, 1994).

It was hypothesized that low or high tolerance could contribute to dysfunctional parenting and behavior problems; however, the regression for referral status revealed that low parental tolerance, rather than high parental tolerance, is related to referral status. The author would predict that low tolerance for misbehavior has greater ramifications for the development of child behavior problems and that low tolerance for misbehavior would be more resistant to intervention. Further study is needed to evaluate the role of tolerance as a risk factor for the development of disruptive behavior disorders and

coercive parent-child interactions. The results from this study provides good evidence that age, being male, greater parental annoyance with behavior, and severe behavior problems are among the factors important for clinic referral status.

Family Size

There was a small but significant correlation between the number of children a mother has and her tolerance for misbehavior ($r = .14$) which may provide support for O'Brien's (1996) finding that the daily parenting hassles encountered by middle class mothers increase significantly with the number of children in the family. In addition to the increase in parenting hassles that accompany larger families, a parent's tolerance for misbehavior may also decrease. One might expect that a veteran parent with multiple children would learn what to expect from children through her experience and become more tolerant of child misbehavior. However, rather than serving as a buffer, this experience with children may be more of a stressor as mothers become overridden by the stress of rearing multiple children.

Maternal Age

Maternal age and child age were significantly linked for this sample. In the regression analyses for the ABI Annoyance Scale, the significant correlation between maternal age and child age ($r = .25$) resulted in multicollinearity problems such that maternal age was not a significant predictor of the ABI when child age was entered in the same regression step; however, both variables were significant when they were entered separately. Maternal age significantly predicted ABI Annoyance scores with older mothers reporting greater annoyance with child behavior. Maternal age also significantly

predicted ABI Punish scores with older mothers' reporting a greater tendency to respond to misbehavior with punishment.

The regression analyses suggest that with increasing maternal age, mothers have less patience for child misbehavior and they become more cognizant of the need for punishing severe behavior. This appears contrary to data presented by Kelley et al. (1992) in which younger, single mothers placed more emphasis on obedience and parent-directed discipline and older, married mothers used more democratic, child-oriented disciplinary practices. The ABI Punish scale may misrepresent the attitudes of mothers in this study as the scale does not account for the severity or timing of punishment; a mother who "always reasons" with her child and a mother who "always spansks" her child could have the same ABI Punish score. The relation between this scale and maternal age may simply reflect that older mothers are more likely to address every misbehavior while younger mothers may let some behaviors go unpunished. It is possible that rather than an increased tendency towards punitiveness, the mothers in this study were referring to reasoning or verbal reprimands when they reported that they would "punish" a large number of misbehaviors. For this reason, future study in this area should use a less ambiguous measure of discipline that will allow for more fine-grained distinctions for how the parent defines "punishment."

SES

Dodge et al. (1994) suggested that disciplinary practices may be accounted for by SES, and their research findings associated lower SES with harsh discipline, lack of cognitive stimulation, lack of maternal warmth, and maternal aggressive values. It was hypothesized that SES would be related to parental tolerance for misbehavior but no such

relation was found for this sample. Instead, SES was found to have a significant and negative correlation to social desirability ($r = -.23$) suggesting that with increasing education and occupational status there was less bias for presenting oneself in a favorable light on the M-C SDS.

Although there was no evidence for a direct SES effect on tolerance for misbehavior or report of child behavior problems, SES was significantly linked to race ($r = .29$). In the regression analysis for which the ECBI Intensity Scale was the dependent variable, race was not a significant predictor of the ECBI when it was included with SES in the same regression step. As a result of the multicollinearity problem between SES and race, these variables were entered separately; neither emerged as a significant predictor of the ECBI.

Previous research utilizing correlational analysis of the relation between SES and self reported parenting revealed that mothers with lower SES were more likely to use authoritarian control whereas high SES mothers were more likely to use rational guidance to illicit behavioral compliance from their children (Susman et al., 1985). The CRI and the ABI scores did not reflect such SES differences in parenting, and it appears that high and low SES mothers are equally likely to have high or low tolerance for misbehavior.

Stress

Although it was hypothesized that parental stress would adversely affect tolerance for child misbehavior, the LES did not predict tolerance in this study. This finding occurred despite analyzing the relation between the CRI and the frequency of positive events, frequency of negative events, frequency of all events, the total positive life events change score, the total negative life events change score, and the total life events change score of the LES. One reason for the failure of this study to find a relation between these

variables may be that the LES was difficult for some of the participants to understand; some gave a valence rating for every item on the measure despite reading directions that indicated they should only provide valence ratings for the events that happened to them within the previous 12 months. The LES negative change score for this study was significantly lower than the normative sample and there was a restricted range of scores. There was also a significant but small relation between the LES negative life events change score and the M-C SDS ($r = .15$) suggesting that participants may have felt uncomfortable reporting all of the events that happened to them during the previous year as it would potentially have presented them in a negative light. It is possible that a more situational measure of parenting stress would be related to parental tolerance for misbehavior, and a hypothesis for future study would be that with increasing situational stress, a parent's tolerance for their child's misbehavior will decrease. There was a small but significant and negative correlation between the LES total negative change score and the ECBI Intensity score ($r = -.11$) suggesting that behavior problems reported on the ECBI were related to negative life events. It is interesting that the ECBI Problem Scale was not significantly correlated with the LES negative change score, given the hypothesized relation between the ECBI Problem scale and parental distress regarding their child (Boggs, Eyberg, & Reynolds, 1990). In fact, results from this study provide stronger support for the hypothesis that the ECBI Problem Scale is another measure of parent tolerance.

Social Desirability

It was hypothesized that the M-C SDS would not be related to the CRI and ABI as these measures should be independent from social desirability to be free from the effects

of a socially acceptable response set. The correlations between the M-C SDS, the CRI, and the ABI were not significant and hierarchical multiple regression analysis indicated that the M-C SDS accounted for little of the variance on the CRI and ABI. Taken together these results suggest that the CRI and the ABI are independent from social desirability.

Scores for both the Caucasian and African American groups on the M-C SDS were significantly different and higher than the normative sample; the mothers from this study tended to present themselves in a favorable light on this measure. There was an SES effect for the M-C SDS total score when racial group comparisons were made by ANCOVA; suggesting that mothers with less education and lower occupational status were more likely to present themselves in a favorable light on the M-C SDS and that SES, rather than racial group membership, influenced social desirability. Correlational analyses revealed that social desirability was significantly related to race ($r = -.17$) and SES ($r = -.23$) such that mothers from low SES backgrounds and African American mothers reported greater social desirability on the M-C SDS. Regression models indicated that race and SES each significantly predicted social desirability when they were entered separately; suggesting a link between race, SES, and social desirability for this sample. Regardless of the link with SES, this sample used a socially acceptable response set, which may have influenced their approach to the other study measures. This tendency to present oneself in a favorable light was especially related to maternal report of disruptive behavior problems as there were a significant correlations between the M-C SDS and the ECBI scales.

Race

Currently there is a lack of information regarding parental tolerance for child misbehavior for parents from all racial/ethnic backgrounds (Forehand & Kotchick, 1996). This has implications for the acceptance of parents from these racial/ethnic groups of behavioral parent training. This study attempted to address this issue by collecting data from Caucasian and African American mothers.

There were no significant differences on the CRI, the ABI, or the ECBI scales between the African American and the Caucasian groups in this study. Additionally, race was not a significant predictor of tolerance, behavior problems, or child referral status. As mentioned in a previous section of this discussion, correlational analyses indicated that race, SES, and social desirability were linked. Additionally, there was a significant and negative correlation between race and marital status ($r = -.37$) suggesting that the Caucasian mothers in this sample were more likely to be married. Because it appeared that multicollinearity between marital status and race influenced the regression analysis in which the CRI was the dependent variable, both were entered separately. Despite the hypothesis that race effects would emerge for tolerance, neither race or marital status emerged as a significant predictor of the CRI.

Previous study has found race effects for the effects of harsh punishment (Deater-Deckard et al., 1996), authoritarian parenting practices (Baumrind, 1972), and cultural differences for parent attitudes towards behavior (Hackett & Hackett, 1993). Perhaps the lack of race effects in this study should not be surprising given that mother and child age were the only demographic variables that demonstrated utility in predicting tolerance. It is likely that parents from very different cultural backgrounds may have less or more

tolerance for child behavior depending on their cultural view towards children (e.g., children should be seen but not heard, children should show respect to their elders). A study in which the covariation between ethnicity and parenting attitudes among Hispanic, Asian, African American, and Caucasian parents may find such tolerance differences between groups.

Tolerance for Specific Behaviors

This study also examined the specific child misbehaviors that differentiated parents with high tolerance and parents with low tolerance. Information about the behaviors that differentiate between mothers with high and low tolerance can be used to develop future measures of tolerance such as a measure presented in videotape format. Pearson correlations between the ABI Annoyance Scale item scores and the CRI total scores indicated that the ABI behaviors significantly associated with tolerance as measured by the CRI were those behaviors that were less severe in nature (i.e., arguing, crying, irritability, nagging). Tolerance as measured by the CRI was independent of parental annoyance with serious behaviors such as biting, destructiveness, fire-setting, hurting pets, kicking others, namecalling, pushing others, rough play, running away, stealing, talking mean to others, verbally threatening others, and cursing. As such, parents who rate themselves on the CRI as having high tolerance for these behaviors should be given further attention. The finding that severe behavior was disturbing to mothers regardless of their CRI total score is consistent with data on teacher's tolerance for classroom behavior. Algozzine (1980) found that teachers from both special education and regular classrooms had less tolerance for socially deviant behavior (e.g., disobedience, destructiveness, temper tantrums) than for socially immature behavior (e.g., anxiety, lack

of self confidence) even though the special education teachers had higher tolerance for disruptive classroom behavior.

It is possible that the behaviors for which all parents had little tolerance actually elicited a reaction much stronger than annoyance or tolerance (such as fear). Behaviors such as fire-setting and running away may frighten parents and this, rather than annoyance, may account for the lack of significant correlations found for these behaviors.

Study Limitations

This study generates many significant and important findings related to parenting, child behavior, and tolerance. These results notwithstanding, several limitations to the study's methodology are present. These points are addressed below.

1. One limitation of this study is that situational factors (such as maternal depression, current stress level, etc.) are not accounted for by the questionnaire data.
2. Self report instruments can be useful because they reveal information about the attitudes of the parent completing the checklist but they also have limitations such as undetermined external validity. We must consider whether the actual behaviors endorsed by parents as annoying are truly annoying to them in the context of the home. We must also consider whether the behaviors listed on the measure are representative of those behaviors that occur at home.
3. The concept of tolerance includes a complex convergence of attitudes, beliefs, perceptions, expectations, situational variables, and parenting styles. It would be erroneous and misleading to consider this construct as unidimensional and therefore, the findings of this study must be interpreted cautiously.

4. One caveat that must be noted regarding the definition of tolerance for this study is that it is not intended to be exhaustive. Although the components of the present definition focus on characteristics of the environment and characteristics of the parent, it is likely that some variables not included in the definition may influence parental tolerance for child misbehavior. For example, cultural variables, moral standards, and the setting of the misbehavior (e.g., church vs. home) can all influence a parent's tolerance for the behavior.
5. Another limitation to the generalizability of the study findings is that the normative sample is geographically limited to North Central Florida. It is unknown how scores on the CRI and ABI may vary as a function of geographical location but it is possible that parents from other racial/ethnic backgrounds and urban/rural locales have differing tolerance for child misbehavior. Further data should be collected from a more nationally representative sample.
6. Although there was a sample of children who had been treated for behavior problems in this study, further data collection with a clinical sample is warranted as the treated group was a very heterogeneous group. Further investigation into the relation between tolerance and clinic referral status with a group of parents participating in a parent training intervention will allow for more causative statements regarding tolerance, the development of behavior problems, and the impact of treatment on parent perceptions such as tolerance.

Implications

As parent-attitude inventories, the CRI and ABI can be useful in the assessment of dysfunctional parenting and the co-occurring disruptive behaviors that can develop

among children between 3 and 10 years of age. The format of these measures allows for brief administration time and scoring. The age and race distribution of this study's sample, which includes African American and Caucasian participants, allows the clinician and researcher to generalize the results from this study to a diverse population. The CRI cut off scores of 25.83 for high tolerance and 35.73 for low tolerance can alert clinicians to overly intolerant or overly permissive perceptions of child misbehavior; this information can provide some direction for clinical interviews with parents.

The focus of this study was on parental attitudes and, as such, the importance of targeting parental attitudes in the course of parent training was discussed. This should not be taken to mean that interactions between parents and their children should be ignored when a family seeks psychological services with the presenting problem of disruptive child behavior. The construct of tolerance can be used as a tool to help the clinician understand the processes through which the parent interacts with the child. It is the author's opinion that parent training should address a parent's skills such as praise, attending, and the use of consistent direct commands when interacting with his or her child. Some parents may benefit most from treatment in which their attitudes towards child behavior (such as tolerance) are also addressed. Understanding a parent's tolerance for child misbehavior may help the clinician know which skills to emphasize in treatment. For example, a parent who has low tolerance for child misbehavior may be overly critical of that child and have difficulty using praise. In this case, the clinician would want to address the parent's difficulty with attending skills in particular. A parent who rates their child's disruptive behavior within normal limits but continues to fall within the low tolerance range on the CRI and ABI may be at greater risk for recidivism as their negative

perception of the child's behavior has not been altered by treatment. There was some evidence in this study to suggest that this scenario may be common as participants who reported their child had already received some treatment for behavior problems still had elevated CRI scores at the time of their participation in this study.

Prior to the development of the CRI and the ABI, it was difficult to determine the extent to which a parent was annoyed with their child's behavior without inferring their attitude informally from other clinical information (direct observation of parent-child interaction, interview data) or constructs (parenting stress). Attitudes towards child misbehavior can be more accurately measured with the CRI and the ABI and parents identified as having extreme tolerance or intolerance can be targeted for intervention. Because the CRI and the ABI include data from a normal sample, the clinician can easily determine whether the parent is reporting a tolerance level that is outside the normal limits.

Prevention efforts with parents who are identified as being extremely lenient or intolerant in their parenting practices could receive parent training as soon as their children are developmentally able to follow rules. O'Leary (1995) suggests that the optimal time to teach parenting skills is when a child begins to crawl because at this time parents begin to place limits on the child's behavior. If parent training is delayed until after the child displays disruptive behavior, the dysfunctional parenting may already be well rehearsed within the family interactions. Parents of pre-school aged children in daycare or those who visit pediatricians' offices could be screened with the CRI and the ABI and then referred for preventative services as needed.

Future Directions

Future study of tolerance should consider whether this construct can be counted among the many variables that mediate actual parenting behavior rather than just parenting attitudes. Observational study of parenting style including classifications of authoritarian and permissive parenting would provide a stronger basis for validating the construct of tolerance. This line of study would need to determine whether tolerance scores could predict observed parenting styles. For example, will a high tolerance score predict a parenting style in which the parent has difficulty setting limits while a low tolerance score predicts an overly controlling parenting style?

O'Leary (1995) stated that some mothers know proper parenting techniques but fail to use them. Anecdotal information from this study suggests that even when parents define behavior as unacceptable, they do not always take an overt action to alter this behavior. Further work is needed to understand the standards that parents use to label behavior as acceptable or unacceptable and how they decide to act upon these labels. Some parents are still ineffective in their parenting when they actively try to alter their child's behavior. Research investigating the discipline mistakes that ineffective parents make relative to effective parents and the relation between "ineffective parenting" and tolerance would increase our understanding of discipline and dysfunctional parenting.

It will be meaningful to assess the tolerance of parents whose children are in treatment for behavior problems as it is unclear whether tolerance is affected by treatment or flexible to change over time. Some parents may continue to show little tolerance for child misbehavior despite improvements in the child's behavior. Such a parent's

tolerance for their child's behavior may take time to "catch up" with the child's improved behavior in therapy.

In summary, although parental tolerance for child misbehavior has received only scant attention in the literature to date, future research will likely clarify the role of this construct in the relation between parenting and child development.

APPENDIX A

Child Rearing Inventory

Read both parts of each item and decide which statement is true for you.
Then circle whether this is Sort of True (S) for you or Really True (R) for you.

Really True	Sort of true				Sort of true	Really true
1. R	S	When my child does something annoying, it bothers me <u>more</u> than it would bother other parents	or	When my child does something annoying it bothers me <u>less</u> than it would bother other parents	S	R
2. R	S	It really bothers me when my child won't do what I ask, even after reminders	or	It does not bother me much when my child won't do what I ask, even after reminders	S	R
3. R	S	It really bothers me when my child interrupts me while I'm talking	or	It does not bother me much when my child interrupts me while I'm talking	S	R
4. R	S	People tell me I'm too easy on my child when he or she misbehaves	or	People tell me I'm too hard on my child when he or she misbehaves	S	R
5. R	S	It really bothers me when my child talks back	or	It does not bother me much when my child talks back	S	R

APPENDIX A CONTINUED

Really True	Sort of true			Sort of true	Really true
6. R	S	It does not bother me much when my child yells or talks loud	or	It really bothers me when my child yells or talks loud	R
7. R	S	I punish or reprimand my child <u>less</u> than I need to	or	I punish or reprimand my child <u>more</u> than I need to	R
8. R	S	It does not bother me much when my child interrupts me while I'm talking on the phone	or	It really bothers me when my child interrupts me while I'm talking on the phone	R
9. R	S	It really bothers me when my child bothers other people by yelling	or	It does not bother me much when my child bothers other people by yelling	R
10. R	S	It does not bother me much when my child whines because he or she wants something	or	It really bothers me when my child whines because he or she wants something	R
11. R	S	I let my child get away with more than most parents would let their children get away with	or	I am more strict with my child than most parents are with their children	R

APPENDIX B

ANNOYING BEHAVIOR INVENTORY

Please read this list of common childhood behavior problems. Give a number from 0 to 3 for how annoying the behavior would be for you if your child acted this way. A rating of 0 would mean that the behavior is not annoying for you. A rating of 3 would mean that the behavior is very annoying to you.

Next, circle the behavior if you think that a child who acts like this should be punished or reprimanded (a parent should spank, scold, reason with, use time-out, ground the child, etc.)

How Annoying Is It?

Not annoying Annoying	Slightly Annoying	More Annoying	Very
0	1	2	3
_____ 1. Always wanting their own way		_____ 21. Noncompliance (not doing what you ask)	
_____ 2. Arguing with friends		_____ 22. Not eating at meal time	
_____ 3. Arguing with brothers or sisters		_____ 23. Pushing others	
_____ 4. Biting others		_____ 24. Pouting	
_____ 5. Crying for no good reason		_____ 25. Rough play	
_____ 6. Dawdling/Stalling/Taking too much time to do things		_____ 26. Running away	
_____ 7. Defiance (not wanting to do what they are told)		_____ 27. Slamming doors	
_____ 8. Destructiveness (e.g., destroying property)		_____ 28. Stealing	
_____ 9. Fighting with friends		_____ 29. Talking back or arguing with parents/teachers	
_____ 10. Fighting with brothers or sisters		_____ 30. Talking mean to others (e.g., "you're stupid")	
_____ 11. Fire-setting		_____ 31. Teasing	
_____ 12. Hitting others		_____ 32. Temper tantrums	
_____ 13. Hurting pets or other animals		_____ 33. Verbally threatening others (e.g., "I'm going to get you")	
_____ 14. Irritability/grouchiness		_____ 34. Using bad language (cursing or swearing)	
_____ 15. Jumping on furniture		_____ 35. Whining	
_____ 16. Kicking others		_____ 36. Yelling	
_____ 17. Lying			
_____ 18. Nagging			
_____ 19. Namecalling			
_____ 20. Noisiness/Being Loud			

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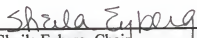
BIOGRAPHICAL SKETCH

Elizabeth Vanessa Brestan was born on November 20, 1970, in Pensacola, Florida. She graduated from Pensacola Catholic High School with honors in May of 1988, and attended DePauw University in Greencastle, Indiana, from 1988 to 1990. While at DePauw University, she joined the Delta Zeta sorority, lettered in varsity cross-country and track, and majored in creative writing and psychology. Elizabeth transferred to Emory University her junior year where she lettered in varsity cross-country and track, qualified for the NCAA Division III Women's Cross-Country National Championship, and broke the outdoor track school record for the 10,000 meter run.


Elizabeth majored in psychology at Emory University and earned a Bachelor of Arts degree in psychology in 1992, also with honors. During the year following graduation, Elizabeth worked as a research assistant in the Department of Psychology at Emory University.

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I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.


Sheila Eyberg, Chair
Professor of Clinical & Health
Psychology

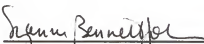
I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.


Stephen R. Boggs
Associate Professor of Clinical and
Health Psychology

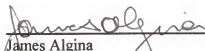
I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.


James H. Johnson
Professor of Clinical and Health
Psychology

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.


Suzanne Bennett Johnson
Professor of Clinical and Health
Psychology

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.



James Algina
Professor of Foundations of
Education

This dissertation was submitted to the Graduate Faculty of the College of Health Professions and to the Graduate School and was accepted as partial fulfillment of the requirements for the degree of Doctor of Philosophy.

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Professions

Dean, Graduate School